DAILY CURRENT AFFAIRS ANALYSIS

18 JULY 2023

1 - Changing colour of Oceans:

GS I

Geography related issues

• Context:

- A recent study found that 56% of the world's oceans have undergone hue changes due to climate change.
- Major conclusions of the study:
- The tropical seas have turned green.
- Particularly the southern Indian Ocean has undergone a significant colour change.
- Why is green so crucial?
- Particularly phytoplankton, which are microscopic organisms that resemble plants, green water is a sign of life.
- What blue represents:
- Colours like blue signify low levels of life.
- The amount of carbon dioxide that the water absorbs is also influenced by hue.
- Presently, 25% of all CO2 emissions are absorbed by the seas.
- What a change in colour indicates:
- Since phytoplankton is necessary for the majority of ocean life and serves as the foundation of the marine food chain, variations in the colour of the water reflect changes in the phytoplankton colonies.
- How was the present study conducted?
- The Moderate Resolution Imaging Spectroradiometer (MODIS), which has been measuring ocean colour for 20 years, provided the researchers with data from 2002 to 2022.
- The seven visible wavelengths that MODIS measures are responsible for how people perceive colour.

- Despite appearing blue, the oceans may actually be a combination of hues with softer wavelength ranges, such as green, blue, and even red.
- When greenhouse gas emissions were taken into consideration, it was discovered that colour may change in around 50% of the world's surface waters, which is consistent with satellite data.
- These figures suggest that 56% of marine environments are supposedly turning blue or green.
- The hue green is a result of the pigment chlorophyll, which aids phytoplankton in food production.
- Plankton-eating species will be impacted by a change in colour brought on by an increase or decrease in population.

Source \rightarrow The Hindu

2 - India-France relations:

GS II



- At the parade commemorating Bastille Day in Paris, France, the Indian Prime Minister will serve as the Guest of Honour.
- Indian and French relations:
- An odd partnership:
- The first strategic alliance between two nations was established soon after India's nuclear test.
- Following the nuclear tests in 1998, France was the first nation to understand the strategic significance of India.
- Contracts for the construction of six European pressurised water reactors (EPR) at the Jaitapur site and the purchase of 36 Rafale planes were signed in September 2016 and March 2018, respectively.
- Transferring technology:
- The French Safran engine, which would be entirely produced in India, was suggested.
- Allegedly, the French pledged to transmit all technology.

- In order to enable UPI and RuPay payments throughout Europe, a recent MoU between NPCI International Payments Limited (NIPL) and Lyra, a French supplier of payment services, may soon be put into action.
- Climate accords:
- A Road Map on Green Hydrogen, which intends to connect the French and Indian hydrogen ecosystems to create a reliable and sustainable value chain for a worldwide supply of decarbonized hydrogen, was recently agreed upon by France and India.
- A road map for managing the blue economy and the oceans was approved in 2022.

• Financial coordination:

- With more than 1,000 French companies now operating there, France has developed into one of India's primary sources of foreign direct investment.
- With cumulative FDI stock of USD 9.83 billion from April 2000 to March 2021, or 2% of all FDI inflows into that country, France ranks as the 11th largest foreign investor in India.
- In France, there are more than 150 Indian businesses (including subsidiaries).
- Our bilateral commerce is still much below its potential despite the fact that India constantly enjoys a trade surplus and its GDP is virtually identical to that of France.
- From April 2020 to March 2021, France and India's bilateral commerce was worth USD 7.86 billion.
- India exported goods to France worth USD 5.6 billion, a fall of 22.9%.
- French exports to India fell by 20.95% to USD 5.1 billion during the same time period.
- Only 1.41% of all of India's international trade is with France.
- It was also jointly stated that a FAST-TRACK system would be made available to French and Indian businesses doing business in each other's countries.
- Cooperation for Development:
- Since 2008, the French Agency for Development, or AFD, has provided over 2 billion euros through technical assistance programmes, loans to the government and state-owned businesses, and other means.
- It has provided the Indian government with a loan of EUR 100 million for the Smart Cities Mission.
- Armed collaboration:
- The two nations have held yearly ministerial-level defence talks since 2018.
- Regular defence drills are also conducted by the three services, specifically:

- Army exercise Shakti
- Navy exercise Varuna
- Air Force exercise named Garuda.
- Along with the other Quad nations, the Indian Navy took part in the French-led La Pérouse exercise in 2021.
- Habitation in space:
- Space collaboration between France and India dates back to the 1960s, when the Sriharikota launch pad was constructed with French technical help.
- New Space India Ltd.'s (NSIL) GSAT-24 communication satellite was recently successfully launched on board Ariane-5 as part of the ongoing bilateral cooperation between ISRO and Arianespace.
- France continues to supply the Indian space programme with a significant amount of equipment and parts.
- Gaganyaan is an Indian programme for sending people into space, and France supports it.
- Civil nuclear co-operation:
- In 2008, France and India reached a civil nuclear cooperation pact.
- A global organisation called ITER, which means "The Way" in Latin, was established in order to build an experimental fusion reactor in Cadarache, France. India belongs to this group.
- Renewable energy and environmental concerns:
- India joined the High Ambition Coalition for Nature and People, which is chaired by France.
- Utilising technology and going online:
- The fastest supercomputer in India, "PARAM-Siddhi-AI," was created in partnership with France.
- The India Embassy in Paris held the InFinity or India France Innovation in Information Technology Summit, which brought governments, corporations, technology influencers, and startups together on a virtual platform to connect and discuss a range of problems relating to digital sovereignty.
- Counter-terrorism:

• India and France have agreed to collaborate in order to have the UN adopt the Comprehensive Convention on International Terrorism (CCIT).

• Indian neighbourhood in France:

- Including NRIs, there are reportedly roughly 109,000 Indians living on the French mainland.
- The majority of people having Indian ancestry come from Gujarat, Punjab, Tamil Nadu, and Puducherry.

• Conclusion:

- France and India have forged an alliance based on shared values and objectives.
- Both have emphasised the significance of preserving strategic autonomy while being aware of the many global dangers.
- In the areas of defence, maritime, counterterrorism, and the Indo-Pacific, France and India continue to have high-level political conversations.
- At the moment, they are collaborating in areas such as cyber, digitalization, green energy, a blue economy, ocean sciences, and space.
- India and France are aware of one another's dependencies and interests, whether they involve China or Russia.
- There is still plenty of room for increased cooperation in light of a long-standing strategic partnership and a shared objective of improving strategic autonomy and resilience.

Source \rightarrow The Hindu

3 - Grand Cross of the Legion of Honour:

GS III

Science and Technology

- Context:
- The highest honour, the Grand Cross of the Legion of Honour, was presented to the Indian Prime Minister by the French President.
- About the Legion of Honour:

- The highest civil and military award in France is called the National Order of the Legion of Honour, or simply The Legion of Honour.
- Napoleon Bonaparte founded the Order in 1802.
- The reward is not accompanied by any tangible or monetary benefit.
- No one may apply for the Legion of Honour; the government chooses the honorees.
- It is referred to as France's national emblem.
- The Legion of Honour grants five degrees, each one becoming more prestigious:
- The three levels are Chevalier (Knight), Officier (Officer), and Commandeur (Commander).
- Grand Officier (Grand Officer) and Grand-croix (Grand Cross) are two titles.
- The Indian Prime Minister has received the highest French honour, which is equal to the Bharat Ratna in India.

Source \rightarrow The Hindu

4 - Rafale Marine jet:



- Context:
- During a pivotal meeting, the Defence Acquisition Council (DAC) approved bids for the purchase of 26 Rafale Marine combat aircraft for the Navy.
- Comparing Rafale aircraft to Marine equivalents:
- The navy version of the Rafale fighter jet is known as a Rafale Marine fighter, and the Indian Air Force flies 36 of them.
- The most recent weaponry is installed on contemporary twin-engine, multifunctional fighter jets like the Rafales, including:
- Aerial-to-air missiles that can see beyond the visible spectrum.
- advanced air-to-surface weaponry from Hammer.
- annihilate cruise missiles.
- These can locate, track, and attack targets because to their advanced radar and sensors.

- The jets can carry a staggering amount of stuff.
- The aircraft also have several modifications created especially for India.
- The armed forces version:
- The jets will be slightly different in the Marine version because the Marines would be flying from aircraft ships at sea.
- Some of the differences include foldable wings, a longer airframe for landing on carriers, and a tail hook for an arrested landing on a carrier.
- The Rafale M nose gear's shock absorber also features "jump strut technology" to provide the aircraft an angle of attack during catapulting.
- This naval version of the aircraft is also capable of transporting a wider range of weapons:
- missiles that target ships.
- airborne weaponry.
- radar intended for shipboard use.

Source → The Hindu 5 - Gujarat PASA Act:

GS III

Internal Security

• Context:

- Avoiding their negative and antisocial behaviours, which threatens to undermine the maintenance of public order.
- Amendments:
- The Act was amended in 2020 to broaden its coverage in the following ways:
- operators of casinos and prostitution rings.
- those who slaughter cattle.
- sexual offences and cybercrimes.

- people who engage in usury, as well
- those who consistently break the Arms Act.

• Regulations for detention:

- A state government order may be used to detain such a person.
- The person may be taken into custody anywhere in Gujarat and may be moved between different detention centres.
- There must be more than one FIR filed against the offender at any police station in the state.
- Only the officer whose territorial jurisdiction includes the offender's residence has the authority to book him under PASA, nevertheless.
- Criticism:
- Misuse:
- The police's "misuse" of the Act has come under fire, especially as the necessity for several FIRs is frequently met by complaints from years ago for which the prisoner has not been proved guilty.
- It has been argued that the Act infringes upon an individual's right to personal liberty.
- Various reasons to hold someone in custody:
- It gives the government the ability to detain someone simultaneously for many justifications by issuing separate orders for each one.
- As a result, even if one of the several grounds is judged "invalid" or "vague" by a court, the detention order might still be upheld on the other grounds.

Source → The Hindu