

**ECONOMY****Credit Growth for MSMEs**

According to a report from TransUnionCibil and Small Industries Development Bank of India (SIDBI), there has been a growth in the credit outstanding amount of Micro, Small and Medium Enterprise (MSME) sector to Rs 20.21 lakh crore, with a year-on-year growth rate of 6.6%. Even according to the Reserve Bank of India (RBI), credit growth to micro and small industries accelerated to 6.4% in June 2021, compared to a contraction of 2.9% in 2020.

**Key Points****Loans to MSMEs:**

- In Financial Year (FY) 2021, the country disbursed loans worth Rs 9.5 lakh crore to MSME sector, higher than preceding year of Rs 6.8 lakh crore in FY 2020.

**Outstanding Credit:**

- MSME credit outstanding has grown by 6.6% in March'21, with the micro segment growing the fastest at 7.4%. Micro segment was followed by the small segment at 6.8% and medium segment at 5.8%.

**Sector Wise Analysis:**

- **Agriculture and Allied Activities:** Credit to agriculture and allied activities continued to perform well, registering an accelerated growth of 11.4% in June 2021, compared to 2.4% in June 2020.
- **Industry:** Within industry, credit to food processing, gems & jewellery, glass & glassware, leather & leather products, mining & quarrying, paper & paper products, rubber, plastic & their products, and textiles registered high growth in June 2021. However, credit growth to all engineering, beverages & tobacco, basic metal & metal products, cement & cement products, chemicals & chemical products, construction, infrastructure, petroleum coal products & nuclear fuels and vehicles, vehicle parts & transport equipment decelerated or contracted.
- **Services:** Credit growth to the services sector decelerated to 2.9% in June 2021, from 10.7% in June 2020, mainly due to contraction in credit growth to commercial real estate, Non-Banking Financial Companies (NBFCs) and tourism, hotels & restaurants. Credit to trade segment continued to perform well, registering accelerated growth of 11.1% in June 2021 as compared to 8.1% a year ago.

**Reason for Growth:**

- The rise in credit offtake by MSMEs is due to a host of government initiatives like the Emergency Credit Line Guarantee Scheme (ECLGS) to tackle the economic downturn created by the Covid pandemic.
  1. ECLGS scheme was launched as part of the Atmanirbhar Bharat Abhiyan package announced in May 2020 to mitigate the distress caused by coronavirus-induced lockdown, by providing credit to different sectors, especially MSMEs
  2. It's objective was to support small businesses struggling to meet their operational liabilities due to the imposition of a nationwide lockdown.
  3. Recently, the government has widened its scope to new sectors, including hospitality, travel and tourism.

**Other Initiatives for MSMEs:**

1. Prime Minister's Employment Generation programme (PMEGP)
2. Scheme of Fund for Regeneration of Traditional Industries (SFURTI)
3. A Scheme for Promoting Innovation, Rural Industry & Entrepreneurship (ASPIRE)
4. Interest Subvention Scheme for Incremental Credit to MSMEs
5. Credit Guarantee Scheme for Micro and Small Enterprises
6. CHAMPIONS portal
7. MSME Samadhan

**SOCIAL ISSUE****Operation Blue Freedom: Team CLAW**

Recently, the Government of India has accorded sanction to Team CLAW to lead a team of people with disabilities to scale Siachen Glacier and create a new world record for the largest team of people with disabilities. This is the land world record expedition part of 'Operation Blue Freedom Triple World Records' being undertaken. Triple Elemental World Records is a series of world records being attempted by the team in 2021 of collectives of people with disabilities achieving great feats on land, in air and underwater.

### Siachen Glacier

- The Siachen Glacier is located in the Eastern Karakoram range in the Himalayas, just northeast of Point NJ9842 where the Line of Control between India and Pakistan ends.
- It is the Second-Longest glacier in the World's Non-Polar areas. Fedchenko Glacier, located in Yazgulem Range, Tajikistan is the Longest glacier in the World's Non-Polar areas.
- The Siachen Glacier lies immediately south of the great drainage divide that separates the Eurasian Plate from the Indian subcontinent in the extensively glaciated portion of the Karakoram sometimes called the "Third Pole".
- The Siachen Glacier is part of Ladakh which has now been converted into a Union Territory.
- The Siachen Glacier is the world's highest battlefield.
- The entire Siachen Glacier has been under the administration of India since 1984 (Operation Meghdoot).



### Key Points

#### About the Expedition:

- Initially, a team of 20 people with disabilities would be selected to undergo training, after which the final expedition team shall be selected.
1. Final expedition team (including a minimum of 6 people with disabilities), who will trek from the Siachen Base Camp to Kumar Post.
  2. Kumar post is located at an altitude of about 15,632 feet.

#### Team CLAW and Operation Blue Freedom:

- Team CLAW: Team CLAW (Conquer Land Air Water) is a team of ex-Indian Special Forces commandos.
1. Generally, all are either from Indian Army Para Commandos or the Naval Marine Commandos, also known as the MARCOS.
  2. These veterans have multiple specialisations - not just in combat but also in other elite skills such as skydiving, scuba diving, mountaineering, emergency medical response and all-terrain survival amongst others.
  3. The initiative was taken by Major Vivek Jacob, a Para (Special Forces) officer.
- Operation Blue Freedom: Operation Blue Freedom is a social impact venture aimed at rehabilitating people with disabilities through adaptive adventure sports.
1. It aims to shatter the common perception of pity, charity and inability associated with people with disabilities and recreate it to one of dignity, freedom and ability.
  2. Further, their focus is to 'design and implement sustainable large-scale employment solutions' for people with disabilities, especially in the 'Environment conservation and Sustainability' space.
  3. It was launched in 2019 by Team CLAW.
- CLAW Global: Team CLAW is in the process of setting up centres across the globe where-in Special Forces Veterans and People with Disabilities are merging in action for creating a better life experience, for not only persons with disability but the non-disabled as well.

**The Disability Problem:**

- Disabilities is an umbrella term, covering impairments, activity limitations, and participation restrictions.
- 1. An impairment is a problem in body function or structure;
- 2. An activity limitation is a difficulty encountered by an individual in executing a task or action;
- 3. A participation restriction is a problem experienced by an individual in involvement in life situations.
- As per Census 2011, in India, out of the total population of 121 crore, about 2.68 crore persons are 'Disabled' (2.21% of the total population).
- 1. Out of 2.68 crore, 1.5 crore are males and 1.18 crore are females.
- 2. Majority (69%) of the disabled population resided in rural areas.
- Globally there are 1 billion people with disabilities, which is 15% of the global population.
- They face a lack of holistic rehabilitation, inadequate skilling, lack of seamless mobility and lack of suitable employment.
- These factors combined together largely confined persons with disabilities to their homes, leading to inaccurate awareness on their issues and wrong perceptions about their abilities.
- Thus, their productive potential is largely untapped leading to global exclusion from mainstream life.

**Programmes/Initiatives for Disabled in India**

1. Accessible India Campaign : Creation of Accessible Environment for PwDs
2. DeenDayal Disabled Rehabilitation Scheme
3. Assistance to Disabled Persons for Purchase/fitting of Aids and Appliances (ADIP)
4. National Fellowship for Students with Disabilities (RGMF)
5. Right of Persons with Disabilities Act 2016

**2. Severe Acute Malnutrition in India**

According to the Women and Child Development Ministry, more than 9.2 lakh children (from six months to six years) in India were 'severely acute malnourished' till November, 2020. It underscores concerns that the Covid-19 pandemic could exacerbate the health and nutrition crisis among the poorest of the poor.

**Key Points**
**About Severe Acute Malnutrition (SAM) :**

- WHO's Definition: The World Health Organisation (WHO) defines 'severe acute malnutrition' (SAM) by very low weight-for-height or a mid-upper arm circumference less than 115 mm, or by the presence of nutritional oedema.
- 1. Children suffering from SAM are nine times more likely to die in case of diseases due to their weakened immune system.
- 2. Nutritional oedema: Abnormal fluid retention in the tissues (oedema) resulting especially from lack of protein in states of starvation or malnutrition. Oedema can, however, occur in starvation even if the blood levels of albumin are not lowered.

**Related Findings:**

- **Number of SAM Children (National scenario):** An estimated 9,27,606 'severely acute malnourished' children from six months to six years were identified across the country till November 2020.
- **States with SAM Children:** The most in Uttar Pradesh (3,98,359 ) followed by Bihar (2,79,427). Uttar Pradesh and Bihar are also home to the highest number of children in the country.
- **States with No Severely Malnourished Children:** Ladakh, Lakshadweep, Nagaland, Manipur and Madhya Pradesh reported no severely malnourished children.

**National Family Health Survey Findings:**

- The National Family Health Survey-4 (NFHS-4), 2015-16 suggests that prevalence of severe acute malnutrition among children was at 7.4%.
- NFHS-5 suggests that malnutrition increased among children in 2019-20 from 2015-16 in 22 states and UTs.
- 1. **Stunted:** Around 13 states and UTs out of the 22 surveyed recorded a rise in percentage of children under five years who are stunted in comparison to 2015-16. Stunting is when a child

has a low height for their age, usually due to malnutrition, repeated infections, and/or poor social stimulation

2. **Wasted:** 12 states and UTs recorded a rise in the percentage of children under five years who are wasted. Wasting is low weight for their height among children, reflecting acute undernutrition. It is a strong predictor of mortality among children under five years of age.
3. **Severely wasted and underweight:** 16 states and UTs recorded a rise in the percentage of children under five years who are severely wasted and underweight in 2019-20.

#### **Impact of Covid-19:**

- Covid-19 is pushing millions into poverty, reducing incomes of many more and disproportionately affecting the economically disadvantaged, who are also most vulnerable to malnutrition and food insecurities.
- The pandemic-prompted lockdowns disrupted essential services, such as supplementary feeding under Anganwadi centres, mid-day meals, immunisation, and micro-nutrient supplementation which exacerbated malnutrition.

#### **Steps Taken by Government**

- **POSHAN Abhiyaan:** The government of India has launched the National Nutrition Mission (NNM) or POSHAN Abhiyaan to ensure a “Malnutrition Free India” by 2022.
- **AnemiaMukt Bharat Abhiyan:** Launched in 2018, the mission aims at accelerating the annual rate of decline of anaemia from one to three percentage points.
- **Mid-day Meal (MDM) scheme:** It aims to improve nutritional levels among school children which also has a direct and positive impact on enrolment, retention and attendance in schools.
- **The National Food Security Act (NFSA), 2013:** It aims to ensure food and nutrition security for the most vulnerables through its associated schemes and programmes, making access to food a legal right.
- **Pradhan Mantri Matru Vandana Yojana (PMMVY):** Rs.6,000 is transferred directly to the bank accounts of pregnant women for availing better facilities for their delivery.
- **Integrated Child Development Services (ICDS) Scheme:** It was launched in 1975 and the scheme aims at providing food, preschool education, primary healthcare, immunization, health check-up and referral services to children under 6 years of age and their mothers.

#### **Way Forward**

- **Home Based and Facility Based Care:** Covid-19 could further exacerbate the situation with shrinking food diversity and low intake combined with episodes of missing food at times. The solutions have to be both home-based care and facility-based care.
- **Build Linkages:** The severe Acute Malnutrition has a direct connection with food availability, utilisation and awareness, the immediate task is to appropriately build linkages with the government systems to ensure families receive not just ration/food, but required education and support.
- **Strengthen Nutrition Rehabilitation Centres (NRCs):** The need to strengthen Nutrition Rehabilitation Centres (NRCs) which are meant to treat SAM cases.
  1. There are studies that suggest that NRCs have not been very effective.
  2. In many cases, it has been seen that SAM cases have been discharged early because either the centre could not continue to keep the same case for a continued period, or the caregivers could not stay for a longer duration at the facility, or there was simply not enough supervision by the higher ups.
- **Designing Customised Menus:** There is the need for designing customised menus in consultation with experts for SAM cases and formulating guidelines.
- **Segregation of SAM Cases:** For administrative and operational convenience, as well as for better accountability, SAM cases could be segregated into smaller units.
  1. The responsibility to manage/coordinate and monitor smaller units could be handed over to independent entities such as medical colleges, local NGOs, women’s collectives – under the overall guidance of the District/Block health staff.
- **Role of Anganwadi Centres:** The identification of SAM children was done by over 10 lakh Anganwadi centres from across the country. The anganwadis have to become much more functional and if the possibility of children reaching anganwadis is going to become hard because of lockdowns, then the anganwadis need to reach the children.

**POLITY****Creamy Layer: OBC**

Recently, some MPs have raised the issue of defining Creamy Layer in the ongoing Monsoon Session of Parliament. Further, the Justice Rohini committee is considering the sub-categorization of OBC quota and if any particular community or group of communities are benefiting most from the OBC quota and how to iron out anomalies.

**Key Points****Background:**

- Based on the recommendation of the Second Backward Classes Commission (Mandal Commission), the government in August, 1990 had notified 27% reservation for Socially and Educationally Backward Classes (SEBCs) in vacancies in civil posts and services that are to be filled on direct recruitment.
- After this was challenged, the Supreme Court in November, 1992 (Indira Sawhney case) **upheld 27% reservation for OBCs, subject to exclusion of the creamy layer.**

**Definition:**

- It is a concept that sets a threshold within which OBC reservation benefits are applicable.
- While there is a 27% quota for OBCs in government jobs and higher educational institutions, those falling within the “creamy layer” (various categories based on income and parents’ rank) cannot get the benefits of this quota.
- Other than the income limit, the current definition of the creamy layer remains the same.

**Categories defined under Creamy Layer:**

- **Income beyond 8 lakh:**
  2. For those not in government, the current threshold is an income of Rs 8 lakh per year.
  3. The income threshold is supposed to be raised every three years. It was last revised in 2017 (more than three years now).
- **Parents’ rank:** For children of government employees, the threshold is based on their parents’ rank and not income.
  1. For instance, an individual is considered to fall within the creamy layer if either of his or her parents is in a constitutional post; if either parent has been directly recruited in Group-A; or if both parents are in Group-B services.
  2. If the parents enter Group-A through promotion before the age of 40, their children will be in the creamy layer.
  3. Children of a Colonel or higher-ranked officer in the Army, and children of officers of similar ranks in the Navy and Air Force, too, come under the creamy layer. There are other criteria as well.

**Government’s Proposal:**

- A draft Cabinet note has stated that the creamy layer will be determined on all income, including salary calculated for income tax, but not agriculture income.
- The government is considering a consensus on Rs 12 lakh, whereas Parliament Committee has recommended to raise upto 15 lakh per year. It also recommended excluding salary and agricultural revenue while calculating the annual income ceiling for the creamy layer category of OBCs

**GOVERNANCE****Menace of Manual Scavenging**

Recently, the centre has claimed that no deaths due to manual scavenging have been reported in the past five years. However, according to the National Convener of the Safai Karmachari Andolan, 472 manual scavenging deaths across the country were recorded between 2016 and 2020, and 26 so far in 2021. Safai Karmachari Andolan is a movement for elimination of manual scavenging.

**Key Points****Manual Scavenging:**

- Manual scavenging is defined as “the removal of human excrement from public streets and dry latrines, cleaning septic tanks, gutters and sewers”.

**Reasons for the Prevalence:**

- **Indifferent Attitude:** A number of independent surveys have talked about the continued reluctance on the part of state governments to admit that the practice prevails under their watch.

- **Issues due to Outsourcing:** Many times local bodies outsource sewer cleaning tasks to private contractors. However, many of them fly-by-night operators, do not maintain proper rolls of sanitation workers. In case after case of workers being asphyxiated to death, these contractors have denied any association with the deceased.
- **Social Issue:** The practice is driven by caste, class and income divides.
  1. It is linked to India's caste system where so-called lower castes are expected to perform this job.
  2. In 1993, India banned the employment of people as manual scavengers (The Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993), however, the stigma and discrimination associated with it still linger on. This makes it difficult for liberated manual scavengers to secure alternative livelihoods.

**Steps Taken:**

- **The Prohibition of Employment as Manual Scavengers and their Rehabilitation (Amendment) Bill, 2020:**
  1. It proposes to completely mechanise sewer cleaning, introduce ways for 'on-site' protection and provide compensation to manual scavengers in case of sewer deaths.
  2. It will be an amendment to The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013.
  3. It is still awaiting cabinet approval.
- **The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013:** Superseding the 1993 Act, the 2013 Act goes beyond prohibitions on dry latrines, and outlaws all manual excrement cleaning of insanitary latrines, open drains, or pits.
- **Prevention of Atrocities Act:** In 1989, the Prevention of Atrocities Act became an integrated guard for sanitation workers; more than 90% people employed as manual scavengers belonged to the Scheduled Caste. This became an important landmark to free manual scavengers from designated traditional occupations.
- **Safaitra Suraksha Challenge:**
  1. It was launched by the Ministry of Housing and Urban Affairs on World Toilet Day (19th November) in 2020.
  2. The Government launched this "challenge" for all states to make sewer-cleaning mechanised by April 2021 — if any human needs to enter a sewer line in case of unavoidable emergency, proper gear and oxygen tanks, etc., are to be provided.
- **'Swachhta Abhiyan App':** It has been developed to identify and geotag the data of insanitary latrines and manual scavengers so that the insanitary latrines can be replaced with sanitary latrines and rehabilitate all the manual scavengers to provide dignity of life to them.
- **SC Judgement:** In 2014, a Supreme Court order made it mandatory for the government to identify all those who died in sewage work since 1993 and provide Rs. 10 lakh each as compensation to their families.

**Way Forward**

- **Proper Identification:** States need to accurately enumerate the workers engaged in cleaning toxic sludge.
- **Empowering Local Administration:** With Swachh Bharat Mission identified as a top priority area by the 15th Finance Commission and funds available for smart cities and urban development providing for a strong case to address the problem of manual scavenging.
- **Social Sensitisation:** To address the social sanction behind manual scavenging, it is required first to acknowledge and then understand how and why manual scavenging continues to be embedded in the caste system.
- **Need For a Stringent Law:** If a law creates a statutory obligation to provide sanitation services on the part of state agencies, it will create a situation in which the rights of these workers will not hang in the air.

**IMPORTANT FACTS FOR PRELIM**

**Amargarh Fort: Rajasthan**

Amargarh Fort of Jaipur, Rajasthan is at the centre of a conflict between the tribal Meena community and local Hindu groups. Members of the Meena community say the Amargarh Fort was built by a Meena ruler predating Rajput rule in Jaipur, and has been their holy site for centuries. They accused Hindu

groups of trying to appropriate tribal symbols into the Hindutva fold, and of changing the name of Amba Mata to AmbikaBhawani.

### **Meena Community**

- The Meenas, also known as the Meos, or Mewati, are a tribe and caste inhabiting parts of western and northern India.
  - According to Meena tradition, the Meenas ruled most of what is now eastern Rajasthan, an area they referred to as "mind-esh" (country of the Meenas). They subsequently were replaced by Rajput clans, the most recent being the KachhwahaRajputs who founded the state of Amber, later known as Jaipur.
  - The community has substantial clout in Rajasthan. Of the 25 Assembly seats (out of 200) reserved for Scheduled Tribes (ST), most are represented by Meena MLAs.
1. The community is also well represented in the bureaucracy. According to Census 2011, STs constitute 13.48% of the state's population.
  2. Due to a scattered population across the state, the community can influence election outcomes in unreserved seats, too.

### **Key Points**

#### **About:**

- The present form of the Amargarh Fort was given in the 18th century by Maharaja Sawai Jai Singh II, founder of Jaipur.
- It has always been believed that there was some construction at the place before Jai Singh II built the fort.
- Prior to Rajput rule by the Kachhwaha dynasty, Jaipur and its nearby regions were ruled by Meenas, who had political control.
- And as claimed by the Meena's the fort was built by a MeenaSardar from the Nadlagotra, now known as BadgotiMeenas.Sardars from the Meena community ruled large parts of Rajasthan till around 1100 AD.

### **Maharaja Sawai Jai Singh II (1693-1744):**

- He was a great warrior and astronomer. He came to power at the age of 11 on the death of his father Maharaja Bishan Singh.
- He was feudatory of the Mughals and Aurangazab conferred the title of Sawai to Jai Singh, meaning one and a quarter, a title that all of Jai Singh's descendants kept.
- He was trained by the best teachers and scholars in art, science, philosophy and military affairs.
- Jai Sing's lineage can be traced back to the Kuchwaha Rajput clan who came to power in the 12th century.
- He built Astronomy Observatories at Delhi, Jaipur, Varanasi, Ujjain and Mathura known as the JantarMantar.Jaipur gets its name from him. Recently it has been declared a UNESCO World Heritage Site.

### **2.India-Indonesia : CORPAT**

The 36th edition of India-Indonesia Coordinated Patrol (India-Indonesia CORPAT) between the Indian Navy and the Indonesian Navy is being conducted.

#### **Key Points**

##### **Naval Exercise:**

- To reinforce maritime links, the two navies have been carrying out CORPAT along their International Maritime Boundary Line since 2002.
- Indian Naval Ship (INS) Saryu, an indigenously built Offshore Patrol Vessel is participating in the 36th edition along with Maritime Patrol Aircraft, to forge strong bonds of friendship across the Indo Pacific.

##### **Aim:**

- Ensuring safety and security of shipping and international trade in the region.
- CORPATs build up understanding and interoperability between navies and facilitate institution of measures to prevent and suppress Illegal Unreported Unregulated (IUU) fishing, drug trafficking, maritime terrorism, armed robbery and piracy.

##### **In Line with SAGAR:**

- As part of Government of India's vision of SAGAR (Security And Growth for All in the Region), the Indian Navy has been proactively engaging with countries in the Indian Ocean

Region for coordinated patrols, cooperation in Exclusive Economic Zone (EEZ) surveillance, passage exercises and bilateral/multilateral exercises. The main objective is towards enhancing regional maritime security.

**Other Military Exercises with Indonesia:**

1. Samudra Shakti: A bilateral maritime exercise.
2. Garuda Shakti: A joint military exercise.

**3. Biotech-PRIDE**

Recently, Biotech-PRIDE (Promotion of Research and Innovation through Data Exchange) Guidelines was released by the Department of Biotechnology (DBT), Ministry of Science and Technology. Further, a website of Indian Biological Data Centre (IBDC) was also launched.

**Key Points**

**Biotech-PRIDE Guidelines:**

- These guidelines envisage to bridge other existing biological datasets/data centres with the IBDC, which will be called Bio-Grid.
- 1. This Bio-Grid will be a National Repository for biological knowledge, information and data.
- 2. Also, Bio-Grid will be responsible for enabling its exchange, developing measures for safety, standards and quality for datasets and establishing detailed modalities for accessing data.
- These guidelines will be implemented through Indian Biological Data Centre (IBDC).
- Currently, India ranks number 4 amongst the top 20 countries contributing biological databases.

**Need for Bio-Grid and its Advantages:**

- With a large population of over 135 crore and heterogeneous character of the country, India needs its own exclusive database for Indian research and solutions.
- This indigenous database will have a huge enabling mechanism for exchange and adoption of data by young scientists and researchers for the benefit of Indian citizens.
- Sharing a wide range of large scale data advances the understanding of the molecular and biological processes. This will contribute to human health, agriculture, animal husbandry, fundamental research and thus will extend to societal benefits.
- Advances in DNA sequencing with a steep drop in DNA sequencing cost have enabled government agencies to fund research towards generation of large volumes of biological data in various sectors of Biosciences.

**Important Schemes and Policies Regarding Biotech:**

1. Biotech-KISAN Programme
2. Atal Jai Anusandhan Biotech Mission - Undertaking Nationally Relevant Technology Innovation (UNaTI)
3. DNA Technology Bill, 2019
4. Genome India Project

**DAILY ANSWER WRITING PRACTICE**

**Qns. The floods in Europe are a wake-up call for us to adopt the Dutch mantra, 'live with water, and build with nature'. Elucidate. (250 words)**

**Ans:**

**Introduction**

Climate change and global warming will continue to cause extreme climatic events. Across the world, countries are being confronted with situations of either too little or too much water and droughts interspersed with floods. Rainfall has become unpredictable.

Recently, a month's rain poured in just 24 hours in Germany and Belgium. This caused multiple rivers to burst their banks and flood parts of the two countries as well as the Netherlands, Luxembourg and Switzerland. These areas of Europe have not witnessed such heavy rainfall for more than a century. The German Chancellor, the Dutch Prime Minister and others attribute the cause of the floods to climate change and call for urgent action to arrest global warming.

**Body**

**Climate change and floods**

- Experts say the more CO<sub>2</sub> the world emits into the atmosphere, the warmer will be the air temperature. Warmer air holds more moisture and results in excess rainfall, which leads to flooding.

- Additionally, increasing temperatures at the poles result in slower movement of storms in the mid-latitudes. As a result, storms linger longer at a specific place.
- The combination of a slow-moving storm and the presence of surplus moisture in the atmosphere results in intense rainfall in one location within a short period of time.
- In 2018, Kerala, for example, witnessed 414 mm of rain in just three days. Rainfall for the period of August 1 to 19, 2018, in Kerala was 164% more than normal.

#### **Measures needed to reduce impacts of such disasters:**

- Flood-prone areas should be identified, and projects initiated on an urgent basis to create room for rivers.
- At present, the bulk of the rainwater is allowed to flow down wastefully to the seas, eroding precious soil in its wake.
- Instead of that, low-risk areas such as playgrounds, maidans, or agricultural fields should be earmarked to store excess rainwater.
- Drains must be built for diverting water into these storage units. This will relieve the stress on the existing drainage infrastructure. The stored water can later be discharged back into the drainage channel once the high water subsides.
- The United Nations Development Programme-World Bank-European Union's Post Disaster Needs Assessment report prepared a set of recommendations for flood management after the 2018 Kerala floods. The important recommendations include,
- Increasing the drainage capacity of the rivers and canals of the State by creating more room for the water to flow.
- Removing obstructions and encroachments from existing water channels, the proper maintenance of such channels and creating additional channels for water to flow.
- Rather than forecast, the millimetres of rain expected, conveying specific information regarding the extent of damage to property and life would likely encourage affected communities to remain alert and respond quickly.
- The government and local media must communicate the warnings to the general public in simple language.
- In the short term, strengthened disaster readiness, planning and preparation will help us deal with sudden, intense rain and consequent floods.
- Practice drills need to be conducted in flood-prone areas, and the state must test the effectiveness of flood warnings. The warnings should be in local languages and in simple terms.

#### **Case study of Dutch in flood management:**

- After two major floods in 1993 and 1995, the Dutch embarked on several projects to widen riverbanks and reshape the areas around rivers.
- The Dutch have gone beyond their conventional dependence on dikes, dams, walls and gates to protect themselves from floods.
- Their current disaster resilience mantra is to live with water, build with nature and make room for the river.
- They champion creating adequate space for rivers to overflow by protecting floodplains from human interference, deepening riverbeds and creating alternate channels for excess water.
- Due to these initiatives, even though many towns were submerged in recent floods in the Netherlands, there were no casualties.

#### **Conclusion**

The European Union accounts for around 8% of the world's carbon emissions from fossil fuels. The recently unveiled "Fit for 55", to reduce carbon emissions and wean its 27 members off fossil fuels will help a great deal in combating climate change if implemented in true spirit.

The floods in Europe serve as a wake-up call to us in India to adopt pragmatic policies and practices that are nature friendly. We must recognise that we will have to learn to live with water in the long term.

### **DAILY QUIZ**

Q1. Consider the following statements:

1. Norman Myers originally developed the concept of Earth Overshoot Day.
2. Earth Overshoot Day marks the date when humanity's demand for ecological resources and services in a given year exceeds what Earth can regenerate in that year.
3. Earth Overshoot Day is calculated by Global Footprint Network.

Which of the given above statements is/are correct?

- a. 1 and 3 only
- b. 2 and 3 only**
- c. 2 only
- d. 1, 2 and 3

Q2. Consider the following statements about the International Association of Insurance Supervisors (IAIS):

- 1. It is the international standards-setting body for the insurance sector.
- 2. It is hosted by the World Trade Organization (WTO).

Which of the given above statements is/are correct?

- a. 1 only**
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Q3. The 'Project BOLD' was in news recently, is launched by which of the following?

- a. Defence Research and Development Organisation (DRDO)
- b. Border Roads Organisation (BRO)
- c. Khadi and Village Industries Commission (KVIC)**
- d. None of the above

Q4. Consider the following statements about Jal Marg Vikas Project:

- 1. It is being implemented by the Inland Waterways Authority of India under the Ministry of Shipping, Government of India.
- 2. It is financially supported by the Asian Development Bank (ADB).

Which of the given above statements is/are correct?

- a. 1 only**
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Q5. Consider the following statements about National Tiger Conservation Authority (NTCA):

- 1. It is a statutory multi-disciplinary body.
- 2. It is set up under the Chairmanship of the Minister for Environment and Forests.
- 3. It approves the tiger conservation plan prepared by the State Government.

Which of the given above statements is/are correct?

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3**