

HISTORY**Maharaja Ranjit Singh**

Recently, the statue of Maharaja Ranjit Singh which was installed in 2019, vandalised by a member of radical outfit Tehrik-e-Labbaik Pakistan (TLP), a religious organisation at the Lahore Fort in Pakistan's Punjab province.

Key Points**Early Life:**

- He was born on 13th November, 1780 in Gujranwala, now in Pakistan.
- He was the only child of Maha Singh, on whose death in 1792 he became chief of the Shukerchakias, a Sikh group.
- His inheritance included Gujranwala town and the surrounding villages, now in Pakistan.

Contribution:**• Founder of the Sikh Empire:**

1. He was the founder of the Sikh Empire by overthrowing Misls.
2. At that time, Punjab was ruled by powerful chieftains who had divided the territory into Misls.
3. Misls refers to the sovereign states of the Sikh Confederacy that rose during the 18th century in the Punjab region in the northern part of the Indian subcontinent after the collapse of the Mughal Empire.
4. He ruled the northwest Indian subcontinent in the early half of the 19th century.
5. He was given the title Lion of Punjab (Sher-e-Punjab) for his success in freeing Lahore (his capital) from the Afghan invaders.

• Modernization of Army:

1. He combined the strong points of the traditional Khalsa army with western advances in warfare to raise Asia's most powerful indigenous army of that time.
2. He also employed a large number of European officers, especially French, to train his troops.
3. He appointed a French General to modernize his army.

• Wide Empire:

1. Ranjit Singh's trans-regional empire (spread over several states) included the former Mughal provinces of Lahore and Multan besides part of Kabul and the entire Peshawar.
2. The boundaries of his state went up to Ladakh — in the northeast, Khyber pass (route the foreign rulers took to invade India) in the northwest, and up to Panjnad in the south where the five rivers of Punjab fell into the Indus.

Legacy:

- The Maharaja was known for his just and secular rule. Both Hindus and Muslims were given powerful positions in his darbar.
- He turned Harimandir Sahib at Amritsar into the Golden Temple by covering it with gold.
- He is also credited with funding Hazoor Sahib gurudwara at the final resting place of Guru Gobind Singh in Nanded, Maharashtra.

Death:

- He died at Lahore in June 1839, almost exactly 40 years after he entered the city as a conqueror.
- In little more than six years after his death, the Sikh state he had created collapsed because of the internecine strife of rival chiefs.

International Recognition:

- In 2016, the town of St Tropez in France unveiled the maharaja's bronze statue as a mark of respect.
- His throne is displayed prominently at the Victoria and Albert Museum in London.
- In 2018, London hosted an exhibition that focused on the history of the Sikh Empire and the international relations forged by the Maharaja.

SOCIAL ISSUE**India's Water Crisis & Women**

India is water-stressed due to changing weather patterns and repeated droughts. And the worst sufferers of this crisis are mostly women. Water scarcity in India is expected to worsen as the overall population is expected to increase to 1.6 billion by the year 2050.

Key Points**Water Crisis:**

- Although India has 16% of the world's population, the country possesses only 4% of the world's freshwater resources.
- In recent times, the water crisis in India has become very critical, affecting millions of people across India.
- As many as 256 of 700 districts in India have reported 'critical' or 'overexploited' groundwater levels according to the most recent Central Ground Water Board data (from 2017).
- Three-fourths of India's rural families lack access to piped, drinkable water and must rely on unsafe sources.
- India has become the world's largest extractor of groundwater, accounting for 25% of the total. Some 70% of our water sources are contaminated and our major rivers are dying because of pollution.

Causes of Water Crisis:

- **Population Growth:**

1. There is insufficient water per person as a result of population growth.
2. The total amount of usable water in India has been estimated to be between 700 to 1,200 billion cubic meters (bcm). A country is considered water-stressed if it has less than 1,700 cubic meters per person per year.

- **Poor Water Quality:**

1. Water in most rivers in India is largely not fit for drinking, and in many stretches not even fit for bathing.
2. Poor water quality is the result of insufficient and delayed investment in urban water-treatment facilities.
3. Moreover, industrial effluent standards are not enforced because the state pollution control boards have inadequate technical and human resources.

- **Dwindling Groundwater Supplies:**

1. There is dwindling groundwater supplies due to over-extraction by farmers.
2. Deficient rain in some areas is also depleting ground water.

- **Unsustainable consumption:**

1. Wells, ponds and tanks are drying up as groundwater resources come under increasing pressure due to over-reliance and unsustainable consumption.
2. Unequal distribution of water, contamination/depletion of local water bodies due to pollution and no proper water treatment facility augment the water crisis in India.

Impact on Women:

- **Vulnerability of Women:**

1. The crisis of water only puts them at a higher risk of vulnerability. Fetching water in India has been perceived as a woman's job for centuries.
2. Women, especially in the rural areas, walk miles to collect water from the nearest source.

- **Reduced Access to Sanitation:**

1. Their marginalisation is compounded by the indignity and insecurity of not having a private spot to fulfil their toilet needs.
2. This whole system of women being forced to be water carriers leads to them having very less time for themselves. This further reduces access to clean sanitation, better physical and mental health of women.

- **Water-Wives:**

1. The entire water management by women has led to polygamy in one drought-prone village of Maharashtra. This involves having more than one spouse to collect water. The arrangement is termed as 'water wives'. This is undoubtedly an example of regressive thinking — of women being seen as substitutes for water pipes or tankers.

Related Government Initiatives:

2. Jal Kranti Abhiyan.
3. National Water Mission.
4. National Rural Drinking Water Programme.
5. NITI Aayog Composite Water Management Index.
6. Jal Jeevan Mission.
7. Jal Shakti Abhiyan.
8. Atal Bhujal Yojana.

Way Forward

- Addressing women's water, sanitation and hygiene requirements is a critical driver in attaining gender equity and unlocking the potential of half of the world's population. The water crisis is a women's issue and feminists need to talk about it.
- The water levels of the floodplain aquifers need to be monitored scrupulously to be well above the river water level to avoid contamination by river water.
- Floodplains can be secured by planting organic food forests or fruit forests which don't demand or consume much water.
- In water management, corporations must play a more active role in using their Corporate Social Responsibility (CSR) efforts towards innovation and conservation of water and harness water recharge.

ECONOMY**Defence Testing Infrastructure Scheme**

Recently, the Defence Ministry has announced that it will soon issue Requests For Proposal (RFPs) to set up eight defence testing facilities in the country in partnership with the private sector. These RFPs would be issued under the Defence Testing Infrastructure Scheme (DTIS). The RFP is a business document that announces a project, describes it, and invites bids for completing it.

Key Points**Background:**

- Under Make in India, India has accorded high priority to development of the manufacturing base of Defence and Aerospace sectors in the country so as to reduce dependence on imports.
- Towards this, the establishment of Defence Industrial Corridors (DICs) in Uttar Pradesh and Tamil Nadu was announced.
- Several other initiatives like Revised Make-II procedures, Innovations for Defence Excellence (iDEX) and Defence Investors Cell have been created with an aim to provide an ecosystem to foster innovation and technology development and encourage Indian industry to invest in Aerospace and Defence sectors. Defence Investors Cell was created to provide all necessary information including addressing queries related to investment opportunities, procedures and regulatory requirements for investment in the sector.

About DTIS:

- The scheme was launched on 8th May, 2020 and would run for the duration of five years.
- It envisages setting up of 6-8 Greenfield Defence Testing Infrastructure facilities that are required for defence and aerospace related production.
- It also envisages to set up test facilities in partnership with private industry.

Objectives:

- Promote indigenous defence production, with special focus on participation of the Ministry of Micro, Small and Medium Enterprises (MSMEs) and Start Ups by bridging gaps in defence testing infrastructure in the country.
- Provide easy access and to meet the testing needs of the domestic defence industry.
- Facilitate indigenous defence production, consequently reduce imports of military equipment and help make the country self-reliant.

Finance and Cooperation:

- The Scheme has an outlay of Rs 400 crore for creating state of the art testing infrastructure over the duration of five years.
 - The projects under the Scheme will be provided with up to 75% government funding in the form of 'Grant-in-Aid'.
 - The remaining 25% of the project cost will have to be borne by the Special Purpose Vehicle (SPV) whose constituents will be Indian private entities and State Governments.
1. Only private entities registered in India and State Government agencies will qualify for forming the implementation agency for the Scheme.
 2. The SPVs under the Scheme will be registered under Companies Act 2013.

2. Financial Inclusion Index

Recently, the Reserve Bank of India (RBI) has unveiled the first composite Financial Inclusion Index (FI-Index). The annual FI-Index for the financial year ended March 2021 crossed the halfway mark to 53.9, as compared to 43.4 for the year ended March 2017.

Key Points

About:

- The index has been conceptualised as a comprehensive index incorporating details of banking, investments, insurance, postal as well as the pension sector in consultation with the government and respective sectoral regulators. It will be published annually in July every year.
- It has been constructed without any 'base year' and as such it reflects cumulative efforts of all stakeholders over the years towards financial inclusion.

Aim: To capture the extent of financial inclusion across the country.

Parameters:

- It captures information on various aspects of financial inclusion in a single value ranging between 0 and 100, where 0 represents complete financial exclusion and 100 indicates full financial inclusion.
- It comprises three broad parameters (weights indicated in brackets) viz., Access (35%), Usage (45%), and Quality (20%) with each of these consisting of various dimensions, which are computed based on a number of indicators. The index is responsive to ease of access, availability and usage of services, and quality of services for all 97 indicators.

Importance of FI Index:

- **Measures Level of Inclusion:** It provides information on the level of financial inclusion and measures financial services for use in internal policy making.
- **Development Indicators:** It can be used directly as a composite measure in development indicators.
- **Fulfill the G20 Indicators:** It enables fulfilment of G20 Financial Inclusion Indicators requirements. The G20 indicators assess the state of financial inclusion and digital financial services, nationally and globally.
- **Facilitate Researchers:** It also facilitates researchers to study the impact of financial inclusion and other macroeconomic variables.

Related Initiatives:

- **Pradhan Mantri Jan Dhan Yojana:** It was announced in August 2014, which proved to be a steady vehicle for financial inclusion. Till now nearly 43 crore poor beneficiaries in the country now have a basic bank account under the yojana.
- **Digital Identity (Aadhaar):** It has catalyzed inclusion and innovation in the delivery of financial services.
- **National Centre for Financial Education (NCFE):** The RBI has released the (NCFE): 2020-2025 document for creating a financially aware and empowered India.
- **Centre for Financial Literacy (CFL) Project:** The CFL project has been conceptualised by the RBI in 2017 as an innovative and participatory approach to financial literacy at the Block level involving select banks and non-governmental organisations (NGOs). Initially set up in 100 blocks on a pilot basis, the project is now being scaled up across the country to every block in a phased manner by March 2024.

ENVIRONMENT & BIODIVERSITY

Plastic Crisis: Sundarbans

Unregulated inflow of relief to the Sundarbans has resulted in a new crisis in the cyclone-battered region as plastic has been accumulated in the area. The threat posed by plastic is so great for the Sundarbans because the region is witnessing frequent tropical storms, which lead to devastation.

Key Points

Plastic Pollution:

- Plastic pollution is caused by the accumulation of plastic waste in the environment.
- It can be categorized in primary plastics, such as cigarette butts and bottle caps, or secondary plastics, resulting from the degradation of the primary ones.

Reasons for Accumulation of Plastic in Sundarban:

- **Cyclones:**
 1. The region is witnessing frequent cyclones, which lead to devastation, followed by the necessity for relief and rehabilitation of inhabitants. In geography, a location's relief is the difference between its highest and lowest elevations.
 2. Plastic waste associated with relief material, used in the aftermath of Cyclone Amphan (May 2020) in the Sundarbans, could cause damage to the eco-sensitive region. Prior to this, the region had witnessed cyclones Fani (May 2019) and Bulbul (November 2019).

- **Tourism:**Besides recent cases of cyclones in the region, tourists have also contributed to the accumulation as they leave behind heaps of plastic waste that is strewn all over the forest.

Concerns:

- Increase Toxicity:
 1. The presence of plastic in saline water increases the toxicity of water and could also contribute to the eutrophication of water.
 - ✓ Eutrophication is the process by which an entire body of water, or parts of it, becomes progressively enriched with minerals and nutrients.
 - ✓ It also results in oxygen depletion.
- Given that Sunderbans is connected to the sea, the increase of plastic in the region could lead to plastic waste entering the ocean.
- 2. **Threat to food System:**The breakdown of plastics in the water will lead to an increase in microplastics, which would subsequently enter the food system.
- **Affects Livelihoods:**Sunderbans is largely dependent on fisheries and aquaculture and any change in the delicate ecosystem can spell doom not only for the ecology but also for livelihoods.

Some related Initiatives:

- In 2019, the Union government in a bid to free India of single-use plastics by 2022, had laid out a multi-ministerial plan to discourage the use of single-use plastics across the country.
- Plastic Waste Management Rules, 2016 which extended the responsibility to collect waste generated from the products to their producers and brand owners.

Importance of Sundarbans

- The Sundarbans ecoregion is located in the tidally active lower deltaic plain of the Ganges–Brahmaputra–Meghna (GBM) basin.
- It hosts the largest contiguous mangrove forest and the only mangrove tiger habitat in the world. Mangrove forests perform multiple ecological functions such as production of woody trees, provision of habitat, food and spawning grounds for fin-fish and shellfish, provision of habitat for birds and other valuable fauna; protection of coastlines and accretion of sediment to form new land.
- Spread over parts of Bangladesh and India, the Protected Areas (PA) within the forested parts are designated by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) as World Heritage Sites in both countries.
- The natural areas spanning 10,000 square kilometres across the two countries are also Ramsar Sites or Wetlands of International Importance.
- The cleared forest tracts in the two countries are now collectively home to over 7.5 million people.
- The area is known for its wide range of fauna, including 260 bird species and is home to many rare and globally threatened wildlife species such as the Estuarine Crocodile, Royal Bengal Tiger, Water Monitor Lizard, Gangetic Dolphin and Olive Ridley Turtles.

Way Forward

- Government should ensure that the entrances to the Sundarbans Biosphere Reserve and the Sundarbans Tiger Reserve are tightly maintained.
- Non-governmental Organizations (NGOs) and locals should be encouraged to collect plastic waste, which should also be recycled.
- Also, the government should organize cleanliness drives to remove plastic from the Sunderbans.

IMPORTANT FACTS FOR PRELIM

New Algal Species: Andaman & Nicobar

Recently, a group of botanists has discovered an algal species with an 'umbrella head' from the Andaman and Nicobar Islands. The Andaman and Nicobar Islands are home to Coral Reefs and are rich in marine biodiversity. In March 2021 two new red algal Seaweed species were discovered along India's coastline.

Key Points

About:

- It is a bright green algae with a size as small as 20 to 40 mm.
- Named after the imaginary sea mermaid, Acetabularia jalakanyakae is very primitive and is a single-cell organism. Jalakanyaka in Sanskrit literally means mermaid and a goddess of oceans.
- It is the first species of the genus Acetabularia discovered in India.

Characteristics:

- It resembles an umbrella or a mushroom. It has grooves on its cap measuring 15 to 20 mm in diameter.
- It is made up of one gigantic cell with a nucleus. Its nucleus forms a rhizoid structure, which facilitates the algae to attach itself to shallow rocks. It is highly regenerative in nature. Rhizoids are a structure in plants and fungi that functions like a root in support or absorption.

Significance:

- As they have a giant cell it is advantageous for molecular biologists who study cellular processes; they can see it and manipulate it with naked eye. For this reason, Acetabularia is considered a model organism.

Concern:

- They along with various Coral Reefs face the threat of sea levels rising due to Global Warming.
- They are highly prone to Ocean Acidification caused by global Greenhouse Gas Emissions as the plants in the genus Acetabularia have rich calcium carbonate deposits that account for almost half their dry weight.

2. Cattle Island: Hirakud Reservoir

The Odisha Forest and Environment Department is starting ecotourism packages for tourists to islands inside the Hirakud reservoir. Cattle island, one of three islands in the Hirakud reservoir, has been selected as a sightseeing destination.

Key Points

Cattle Island:

- It is located in one of the extreme points of Hirakud Reservoir. It is completely inhabited by wild animals, and without any trace of humans.
 - It is near Kumarbandh village of Belpahar-Banharpali range which is about 90 km from Sambalpur, Odisha.
 - The island is a submerged hill, and before the construction of Hirakud Dam it was a developed village.
1. During the resettlement period, villagers left some of their cattle behind; when the dam construction was over, the cattle settled on the hilltop.
 2. As the area started to submerge following the dam's construction, the cattle moved up to Bhujaahad, an elevated place in Jharsuguda district. Subsequently named 'Cattle island'.

Hirakud Dam:

Establishment:

1. It is a multipurpose scheme conceived by Er. M. Visveswaraya in 1937, after recurrence of devastating floods in Mahanadi river.
2. Its first hydro power was commissioned in 1956.
3. It is the longest dam of India.

Location:

1. The dam is built across river Mahanadi at about 15 km upstream of Sambalpur town of Odisha.
2. The Mahanadi River system is the third largest of peninsular India after Godavari and Krishna, and the largest river of Odisha state.
3. It rises from a place near Sihawa in Bastar hills in the state of Chhattisgarh to the south of Amarkantak.
4. The catchment area of the river extends to Chhattisgarh, Madhya Pradesh, Odisha, Jharkhand and Maharashtra.

Objectives:

1. **Irrigation:** The project provides 1,55,635 hectares of Kharif and 1,08,385 ha of Rabi irrigation in the districts of Sambalpur, Bargarh, Bolangir and Subarnapur. The water released through the power house irrigates further 4,36,000 ha of regions in Mahanadi Delta.
 2. **Power Generation:** The installed capacity for power generation is 347.5 MW through its two power houses at Burla, at the right bank and Chiplima, at 22 km downstream of the dam.
 3. **Flood Control:** The project provides flood protection to Mahanadi basin including 9500 sq. km of delta area in districts of Cuttack and Puri.
- Wildlife Sanctuary:**
1. The Debrigarh wildlife sanctuary is located near Hirakud dam. It is bounded on the east and north by the huge Hirakud reservoir. It is one of the select few sanctuaries in the state supporting both terrestrial and aquatic biodiversity.

DAILY ANSWER WRITING PRACTICE

Qns. Discuss the challenges faced by Indian students abroad and provide suggestions to address the same. (250 words)

Ans:

Introduction

According to Global Migration Report 2020, India continues to be the largest country of origin of international migrants with a 17.5 million-strong diaspora across the world, and it received the highest remittance of \$78.6 billion (this amounts to a whopping 3.4% of India's GDP) from Indians living abroad.

Body

According to UNESCO, there were 5 million international students across the globe in 2018, and 750,000 of those happened to be from India. However, Covid-19 has forced students across India to rethink their decision to study abroad and even where they do so.

Indian students in abroad:

- Students from China and India accounted for 47% of all active foreign students in the U.S. in 2020
- Indian students comprised the second-largest student community in the U.K. and Australia in 2019-2020.
- Similarly, Indian students are now the largest group within the international student community in Canada.

But despite that, during the Covid-19 pandemic, Indian students face several problems which need to be addressed.

Challenges Faced by Indian Diaspora

- **Issues faced by Indian students during Covid-19:**
- 2. Indian students were forced to delay their plans in 2020 due to the imposition of lockdowns, disruption of flights, and embassies not issuing student visas.
- 3. Furthermore, many countries have closed their borders and/or restricted flights from India.
- 4. Many foreign universities require students to get vaccinated before they go. Covaxin and Sputnik V are yet to be recognised by the World Health Organization. Countries like the U.S. do not accept students who have been inoculated with these vaccines and have told them to get re-vaccinated.
- 5. Due to the disruption caused by COVID-19, students overseas are finding it difficult to get jobs.
- All this led to a drop in the number of Indian students going abroad to study in 2020.
- According to the Ministry of External Affairs, while in 2019 nearly 5.9 lakh students went overseas for higher education, in 2020 only 2.6 lakh were able to go.

Way Forward

- Policies pertaining to air travel and recognition of Covaxin need to be addressed at the earliest to facilitate smooth travel for tourists seeking to go overseas.
- Indian diaspora can provide the requisite strategic impulse, which makes it all the more important to unlock India's potential.
- India should formulate a new NRI policy, the government must immediately work with developed countries to ask that they kick back a portion of the income tax revenues they collect from the Indian diaspora.
- This is fair because these countries did not invest anything in creating this talent but benefit immediately when the immigrant pays taxes abroad.
- There is a need for a strategic diaspora evacuation policy from conflict zones in a world where crises materialise without warnings and give very little reaction time for governments.
- India's foreign policy aims to translate partnerships to benefits for key projects like Swachh Bharat, Clean Ganga, Make in India, Digital India, and Skill India, the diaspora has plenty of scopes to contribute.
- VAJRA (Visiting Advanced Joint Research Faculty) scheme which seeks to formalise a rotation program wherein top NRI scientists, engineers, doctors, managers and professionals serve Indian public sector organizations for a brief period, lending their expertise- is a step in the right direction.
- Improvement in ease of doing business will go long, in enabling investments from the Indian diaspora.

Conclusion

Despite the risks involved, over 91 per cent of Indian students expressed a strong interest in studying abroad as soon as they were allowed to do so. As the international policies change and the universities reopen, it remains to be seen where the Indian students appear on the global landscape and which countries will be countries will be their focus.

DAILY QUIZ

Q1. Consider the following statements:

1. A whip is an official of a political party who acts as the party's 'enforcer' inside the legislative assembly or house of parliament.
2. The concept of the whip was inherited from the British parliamentary system.
3. Under the Tenth Schedule of the Indian Constitution a political party has a constitutional right to issue a whip to its legislators.

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**

Q2. Section 8 of the Representation of the People (RP) Act, 1951 was in news recently, is related to which of the following?

- a. Disqualification of MPs and MLAs for failure to lodge account of election expenses.
- b. Disqualification of MPs and MLAs for corrupt practices.
- c. **Disqualification of MPs and MLAs on conviction for certain offences.**
- d. None of the above

Q3. Consider the following statements about International Criminal Court (ICC):

1. It is the first and only permanent international court with jurisdiction to prosecute individuals for the international crimes.
2. It was established by the Rome Statute.

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

Q4. With reference to Simlipal Biosphere Reserve, consider the following statements:

1. It is located in northeast India.
2. It has the largest zone of Sal in all of India.
3. It is home to Panthera tigris tigris (Royal Bengal Tiger) and Elephas maximus (Asiatic Elephant).

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**

Q5. Consider the following pairs:

1. Abujmarh: Jharkhand
2. Singhbhum: Odisha
3. Kovalam: Kerala

Which of the given above pairs is/are correctly matched?

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