

CLIMATE CHANGE

Face The Climate

Context:

- This year has seen India record its warmest ever February and the driest August since time-series temperature and rainfall data became available from 1901.
- The current year seems on course to set new benchmarks in the annals of climate change. Its effects are no longer confined to just damaging the wheat crop weeks away from harvesting or delaying the pace of kharif sowings.

What is climate change?

Long-term changes in temperature and weather patterns are referred to as climate change. Such changes can occur naturally as a result of variations in the sun's activity or massive volcanic eruptions.

However, since the 1800s, human activities have been the primary cause of climate change, owing mostly to the use of fossil fuels such as coal, oil, and gas.

Effects of climate change on

Weather

- Higher average temperatures
- Longer-lasting droughts
- More intense wildfires
- Intense and frequent cyclone and storms

Industries

- Climate change is now being flagged as the “single biggest business risk” by consumer good firms. Unseasonal showers during the last summer season crimped demand for ice-cream and cold beverages as well as sales of air-conditioners and refrigerators.

Environment

- Melting sea ice
- Sea level rise
- Flooding
- Warmer ocean waters and marine heat waves

Agriculture

- **Less predictable growing seasons:** For farmers, coping with the vagaries of the monsoon is a challenge probably as old as agriculture itself.
- But climate change isn't simply about monsoon failures. Instead, it has to do with fewer rainy days and extended dry spells, interspersed with intense precipitation and also extreme temperature deviations.
- **Impact on non-farm activities:** As a consequences of it, it is also effecting non-farm businesses as bad monsoons basically impacted rural incomes and, in turn, sales of tractors, two-wheelers and fast-moving consumer goods.
- **Reduced soil health Healthy:** soil has good moisture and mineral content and is teeming with bugs, bacteria, fungi, and microbes that in turn contribute to healthy crops. But climate change, particularly extreme heat and changes in precipitation, can degrade soil quality.

Carrying out business activities as per changing situation due to climate change

- The milder summers, shorter winters and unseasonal rains do much more, by creating less-manageable uncertainties for companies used to planning production and building stocks based on established demand patterns.
- Therefore, there is need to diversify product portfolios to ensure there's always enough of something to sell through the year. If a “season” turns out good, treat it as a bonus.

Framing and implementing the agriculture policy while considering economic growth

- It's not farmers and businesses alone. Even economic policymakers need to incorporate climate change into their growth and plan models.
- There has to be more investment in knowledge about all potential outcomes and probabilities of occurrences with regard to extreme weather events across sectors.
- Such knowledge generation, extending to breeding of temperature stress-tolerant or drought-resistant crops and timely forecasting of large storms and heat waves, is essential in a world of both adaptation to and mitigation of climate change.

Conclusion:

- Since climate change isn't sparing anyone, including the big FMCG players, and adaptation is something that's of more immediate interest, it makes sense to get everyone on board.
- Let government, industry, meteorologists, agricultural scientists and disaster management specialists together draw up a national climate adaptation strategy for India.

POLITY**Press Freedom of India****Context:**

- **A free press is critical to preserving democracy and promoting honest and responsible government. Recent measures against journalists linked with the online portal NewsClick, including searches, seizures, and arrests, have raised concerns about digital data privacy and press freedom in India.**
- **In the middle of the digital revolution, India faces a digital authoritarianism threat. At this critical point, India requires both political action and judicial resolve to protect press freedom in the country.**

What exactly is meant by "Press Freedom"?

- Press freedom is a key principle that permits journalists and media organizations to function freely and without censorship or intervention from the government. It is a fundamental component of free expression and is required in a democratic society.

The following major components of press freedom are included:

- **Censorship-Freedom:** Journalists and media outlets should be able to publish or broadcast news and information without fear of government censorship.
- **Access to Information:** A free press must have access to information and sources in order to research and report on public-interest issues.
- **Editorial independence** ensures that news reporting is fact-based and not affected by other interests.
- **Source Protection:** Journalists should be able to protect their sources in order to encourage whistleblowers and informants to come forward with information without fear of being exposed or retaliated against.
- **Pluralism and Diversity:** A free press should represent a wide range of perspectives and beliefs, enabling for open debate and discussion in society.
- **Accountability:** The media should hold those in power accountable by investigating and reporting on their actions and decisions.

Background in the Constitution:

- The Constitution makes no mention of press freedom. However, freedom of the press or media refers to the rights granted by the Indian Constitution in Article 19(1)(a) under the freedom and expression of speech. It encourages independent media and democracy by allowing citizens to express their support or opposition to the government's actions.
- The right to freedom of thought and expression is contained in Article 19 of the Universal Declaration of Human Rights; this right includes the freedom to hold opinions without interference and to seek, receive, and impart information and ideas through any media and regardless of borders.
- Article 19(2), on the other hand, imposes some constraints in order to defend the nation and its integrity.

Status of Press Freedom in India:

- World Press Freedom Index ranks countries and regions according to the level of freedom available to journalists.
- It has been published every year since 2002 by Reporters Without Borders.
- Each country or territory's score is evaluated using five contextual indicators: political context, legal framework, economic context, sociocultural context and safety.
- In 2023, India ranked 161st among the 180 countries with a score of 36.62 out of 100. In 2022, India's rank was 150.

The Importance of a Free Press for India

- **Democracy and Accountability:** Journalists investigate and report on government actions, policies, and decisions, holding officials accountable for their actions.

- **Information Dissemination:** It helps citizens stay informed about current events, government activities, and societal issues, enabling them to make informed decisions and participate actively in the democratic process.
- **Check on Power:** A free press acts as a check on the abuse of power by the government and other powerful entities. It helps uncover corruption, human rights abuses, and other wrongdoing, making it difficult for those in authority to act with impunity.
- **Transparency and Accountability:** A free press promotes transparency in government operations and decision-making processes. It helps uncover hidden agendas, conflicts of interest, and other factors that may influence government actions.
- **Diverse Voices:** India is a diverse country with a multitude of languages, cultures, and perspectives. A free press provides a platform for diverse voices and viewpoints, ensuring that the concerns of various communities are heard.
- **Protection of Fundamental Rights:** A free press is a guardian of fundamental rights, including the right to freedom of expression and the right to know. It helps protect these rights by advocating for the rights of individuals and groups.
- **International Standing:** India's reputation on the global stage is influenced by its commitment to press freedom. Upholding press freedom demonstrates a commitment to democratic values and human rights, enhancing India's standing in the international community.

Which Institutions are Responsible for Protecting Press Freedom in India?

- **Press Council of India (PCI):** The Press Council of India is a statutory body established under the Press Council Act, 1978. It acts as a watchdog to safeguard and promote press freedom and the ethical standards of journalism.
- **Ministry of Information and Broadcasting:** The Ministry of Information and Broadcasting is a government body responsible for formulating policies and guidelines related to the media sector in India.
- **News Broadcasters Association (NBA):** NBA is a self-regulatory body representing the private television news and current affairs broadcasters in India. It formulates and enforces a code of ethics and standards for television news channels.
- **Editors Guild of India:** This is a voluntary association of editors of leading newspapers and news magazines in India. It plays a crucial role in defending press freedom and addressing issues related to the rights and responsibilities of journalists.
- **Legal System:** India's legal system, including the judiciary, plays a significant role in upholding press freedom. Courts have the authority to address violations of press freedom, protect journalists, and interpret laws related to media.
- In 1950, the Supreme Court in *Romesh Thappar v. The State of Madras* observed that freedom of the press lay at the foundation of all democratic organizations.
- **International Organizations:** International organizations such as Reporters Without Borders (RSF) and the Committee to Protect Journalists (CPJ) monitor press freedom in India and raise awareness about violations on the global stage.

Challenges associated with Press Freedom in India

- **Legal and Regulatory Constraints:** India has laws that can be used to restrict press freedom, such as defamation laws, sedition laws, and laws related to national security. These laws are sometimes used to intimidate journalists and media organizations.
- **Government Interference:** There have been instances of government interference in the editorial independence of media outlets. Governments may use advertising budgets as a tool to reward or punish media organizations, which can influence their reporting.
- **Threats and Violence:** Journalists in India often face physical threats and violence, especially when reporting on sensitive issues like corruption, organized crime, or communal tensions. Some journalists have been attacked or even killed in the line of duty.
- **Self-Censorship:** Due to fear of reprisals or pressure from various sources, journalists and media outlets may engage in self-censorship, avoiding certain topics or taking a cautious approach to reporting.
- **Ownership and Control:** Media ownership in India is often concentrated in the hands of a few powerful entities, which can influence editorial decisions and limit the diversity of voices in the media landscape.

- **Defamation Lawsuits:** Journalists and media organizations in India are frequently targeted with defamation lawsuits, which can be time-consuming and financially burdensome.

Conclusion

- Addressing the issue of press freedom in India will require a concerted effort from various stakeholders, with a shared commitment to upholding the principles of a free press in a democratic society. It is a complex challenge that needs continuous attention and action to ensure a vibrant and independent media environment in the country.

PRELIM FACTS**1. Indian Ocean Rim Association**

Context: Sri Lanka will assume the leadership of the Indian Ocean Rim Association (IORA) during the 23rd Council of Ministers' Meeting, which is scheduled for October 11th, 2023, in Colombo, Sri Lanka. It will preside over the association from 2023 until 2025. Bangladesh held the chairmanship from November 2021 - November 2023.

What does the Indian Ocean Rim Association stand for?

- The vision for IORA arose during a visit to India by then-South African President Nelson Mandela in 1995, when he stated that "the natural urge of the facts of history and geography should broaden itself to include the concept of an Indian Ocean rim for socio-economic co-operation."
- It served as the foundation for the Indian Ocean Rim Initiative in March 1995 and the establishment of the Indian Ocean Rim Association (then known as the Indian Ocean Rim Association for Regional Cooperation) in March 1997.

Members:

- Currently, IORA has 23 Member States and 11 Dialogue Partners.
- Members: Australia, Bangladesh, Comoros, France, India, Indonesia, Iran, Kenya, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Oman, Seychelles, Singapore, Somalia, South Africa, Sri Lanka, Tanzania, Thailand, United Arab Emirates, Yemen.
- Dialogue Partners: China, Egypt, Saudi Arabia, Germany, Italy, Japan, South Korea, Russia, Turkey, the United Kingdom, and the United States of America.
- **Secretariat: Mauritius.**

2. World Cotton Day 2023

Context: In conjunction with Cotton Corporation of India (CCI) and the EU-Resource Efficiency Initiative, the Ministry of Textiles recently conducted a seminar for World Cotton Day (7th October, 2023) that discussed best practices and sustainable ways in the cotton value chain.

About

- The introduction of the "Bale Identification and Traceability System" (BITS) using Blockchain Technology resulted from the conference.
- It also resulted in the Kasturi Cotton initiative, which promotes excellent cotton with traceability.

What is Bale Identification and Traceability System (BITS) and Kasturi Cotton Program ?**Bale Identification and Traceability System (BITS):**

- The BITS is a technological initiative in the cotton industry that utilizes Blockchain Technology to assign unique QR codes to cotton bales.

Objective:

- BITS was introduced to ensure that key information about cotton bales, such as their quality, variety, origin, and processing details, is transparent and easily accessible to both domestic and international buyers.

Traceability:

- By scanning the QR code, stakeholders, including cotton buyers, textile manufacturers, and others, can trace the entire journey of the cotton bale from its origin to the final product.

Implementation:

- BITS is implemented by the Cotton Corporation of India (CCI) in collaboration with other relevant stakeholders such as State Governments.

Kasturi Cotton Program:

- The Kasturi Cotton Program is an initiative introduced by the Ministry of Textiles in India to promote the production and availability of premium quality cotton with traceability.

- TEXPROCIL, in collaboration with CCI on behalf of the Ministry of Textiles, is overseeing the implementation of this program.

Certified Quality:

- Kasturi Cotton is not just any cotton; it is certified to meet certain quality standards, which may include fiber length, strength, color, and other characteristics that make it suitable for premium textile products.

3. Arunachal Pradesh Gets GI Tags for Three Products

Context: Arunachal Pradesh recently obtained Geographical Indication (GI) status for three products: Arunachal Yak Churpi, Khaw Tai (Khamti rice), and Tangsa cloth.

About**Arunachal Yak Churpi:**

Origin: Arunachal Yak Churpi is made from the milk of the Arunachali yak, a rare breed found largely in Arunachal Pradesh's West Kameng and Tawang districts.

Tribal Yak Pastoralists: This milk is derived from yaks raised by the Brokpas, a tribal people noted for their yak husbandry abilities.

These pastoralists migrate their yaks seasonally, transporting them to higher altitudes in the summer and descending to mid-altitude mountainous regions in the winter, because yaks cannot survive at lower altitudes in the summer.

Churpi is high in protein and serves as an important source of nutrition in Arunachal Pradesh's vegetation-depleted, cold, and steep highland regions.

Khaw Tai (Khamti Rice):

- Khaw Tai is a chewy sticky rice variety grown by traditional Khampti tribal farmers in the Namsai region.

Textile Tangsa:

- Tangsa Textile products made by the Tangsa tribe of Changlang area are famous for their unusual designs and bright colors.
- This traditional workmanship displays the region's cultural diversity.

4. USS Gerald R Ford

Context: Following a surprise attack on Israel by Hamas, the USS Gerald R Ford carrier strike group was dispatched to the Eastern Mediterranean to support Israel.

About

- The USS Gerald R Ford, a \$18 billion nuclear-powered aircraft carrier, is the United States Navy's newest and most modern aircraft carrier.
- The USS Gerald R Ford is the world's largest warship.
- More than 4.5 Qutub Minars would fit on the deck of the USS Gerald R Ford if measured lengthwise.
- At full load, it displaces 100,000 tonnes, which is roughly four times the weight of the steel used in the Howrah Bridge.
- At full load, India's aircraft carrier INS Vikrant weighs 45,000 tons.
- The carrier's size allows it to support up to 90 aircraft.
- To conduct all operations aboard the carrier, a crew of over 4,500 personnel is needed (including those running the ship, those in the air wing and other support staff).
- For comparison, INS Vikrant operates a total of 36 aircraft and is run by a crew of roughly 1,650.
- Despite its aircraft and onboard defence systems, the Gerald R Ford, like all aircraft carriers, always travels with the defensive cover of a carrier strike group (CSG).
- The aircraft carrier, which entered service in 2017, is named after former US President Gerald R Ford (in office: 1974-77).

5. Indian Pharmacopoeia Commission

Context: During a recent PDG Stakeholder conference in Hyderabad, the Pharmacopoeial Discussion Group (PDG) announced the Indian Pharmacopoeia Commission (IPC) as a PDG member.

Why in news?

After 1 year of pilot phase, based on IPC's involvement, contribution and future potential, the decision on inclusion as permanent member of PDG was taken.

About

- It is an autonomous Institution of the Ministry of Health and Family Welfare, Govt. of India.
- It is created to set standards of drugs in the country.

Functions:

- Its basic function is to update regularly the standards of drugs commonly required for treatment of diseases prevailing in this region.
- It publishes official documents for improving Quality of Medicines by way of adding new and updating existing monographs in the form of Indian Pharmacopoeia (IP).
- It further promotes rational use of generic medicines by publishing National Formulary of India.
- It prescribes standards for identity, purity and strength of drugs essentially required from health care perspective of human beings and animals.
- It also provides IP Reference Substances (IPRS) which act as a finger print for identification of an article under test and its purity as prescribed in IP.

What is the Indian Pharmacopoeia (IP)?

- These requirements are authoritative in character. They are enforced by regulatory bodies in India for the quality monitoring of medications.
- The IP requirements are legally acceptable during Quality Assurance and in the event of a legal dispute.
- It is an official document designed to contribute to the overall quality control and assurance of pharmaceutical products marketed in India by enhancing their safety, efficacy, and cost.
- It contains a collection of authoritative drug analysis methodologies and requirements.
- The IP, or any portion of it, has legal character under the Second Schedule of the Drugs and Cosmetics Act of 1940 and its Rules 1945.

6. Lakhpati Didi Initiative

Context: Prime Minister recently chaired a high-level meeting to review the progress made in realising his dream of making 2 crore 'Lakhpati Didis' in India.

About

- The Prime Minister announced it in his Independence Day speech on August 15, 2023.
- The goal is to inspire women to develop micro-enterprises in their communities.
- The government intends to teach two crore women through the Lakhpati Didi Initiative.
- The program aims to equip women in self-help groups (SHGs) to earn a sustainable income of at least Rs 1 lakh per year per home.
- DAY-NRLM initiated the initiative, in which each SHG household is encouraged to engage in numerous livelihood activities in conjunction with value chain interventions, resulting in a sustainable income of Rs 1 lakh or more per year.
- Under this scheme, women will be trained in various skills, such as plumbing, LED bulb making, drone operation and repair, and tailoring and weaving.
- After completing the training, women will be provided with opportunities to earn income using their skills.
- The ministry of rural development is adopting a whole-of-government approach for maximum impact through convergence to transform the rural economy with the enabling of 'Lakhpati Didis'.

7. Mukundra Hills Tiger Reserve

Context: The forest department started the inaugural jungle safari at the Mukundra Hills Tiger Reserve recently.

About

- **Location:** Mukundra Hills Tiger Reserve, popularly known as Darrah Wildlife Sanctuary, is spread across 4 districts– Bundi, Kota, Jhalawar, and Chittorgarh in Rajasthan.
- The park is situated in a valley formed by two parallel mountains, Mukundra and Gargola.
- The tiger reserve was constituted in the year 2013, which encompasses the area of Mukundra National Park, Dara Sanctuary, Jawahar Sagar Sanctuary, and part of Chambal Sanctuary.
- It was once a hunting preserve belonging to the Maharaja of Kota.
- **River:** It is located on the eastern bank of the Chambal River and is drained by its tributaries.
- **Vegetation:** Dry Deciduous Forest
- **Flora:**

- Kala Dhok or Kaladhi (*Anogeissus pendula*) is the predominant species, along with Khair, Ber, Kakan, Raunj, etc.
- On higher slopes, *Anogeissus pendula* is replaced by *Anogeissus latifolia*, along with Bel, Salar, Uum, and Shisham.
- **Fauna:**
- The important fauna includes Leopard, Sloth bear, Nilgai, Chinkara, Spotted Deer, Small Indian Civet, Toddy Cat, Jackal, Hyena, Jungle Cat, Common Langur, etc.
- The common reptiles and amphibians are Pythons, Rat Snake, Buff-striped keelbacks, Green keelback, crocodiles, Gharial, Otter, and Turtles.

ANSWER WRITING

Q. A unique form of temple architecture developed on the Himalaya in northern Indian states. Elucidate.

Answer:

Introduction

- Most of the architectural remains that survive from Ancient and Medieval India are religious in nature.
- In different parts of the country, the distinct architectural style of temples was the result of geographical, ethnic and historical diversities.
- Two broad orders of temples in the country are known as Nagara in the north and Dravida in the south.
- At times, the Vesara style of temples is also found as an independent style, created through the selective mixing of the Nagara and Dravida orders.

Body

- **Gandhara Influence:** A unique form of architecture developed in the hills of Kumaon, Garhwal, Himachal and Kashmir. Kashmir's proximity to prominent Gandhara sites (such as Taxila, Peshawar and the northwest frontier) lent the region a strong Gandhara influence by the fifth century CE.
- Influence of the Gupta and post-Gupta traditions that were brought to it from Sarnath, Mathura and even centres in Gujarat and Bengal.
- The images of Mahishasuramardini and Narasimha at the Laksna-Devi Mandir are evidence of the influence of the post-Gupta tradition.
- Both the images show the influence of the metal sculpture tradition of Kashmir. The hills also had their own tradition of wooden buildings with pitched roofs.
- At several places in the hills, while the main garbhagriha and shikhara are made in a rekha-prasada or latina style, the mandapa is of an older form of wooden architecture. Sometimes, the temple itself takes on a pagoda shape.
- One of the most important temples is Pandrethan, built during the eighth and ninth centuries. In keeping with the tradition of a water tank attached to the shrine, this temple is built on a plinth built in the middle of a tank.
- This temple is a Hindu one, possibly dedicated to Shiva.
- The architecture of this temple is in keeping with the age-old Kashmiri tradition of wooden buildings.
- Due to the snowy conditions in Kashmir, the roof is peaked and slants slowly outward in hill temples.
- The temple is moderately ornamented, moving away from the post-Gupta aesthetics of heavy carving.
- However, of the temples in Kumaon, the ones at Jageshwar in Almora, and Champavat near Pithoragarh, are classic examples of nagara architecture in the region.

Conclusion

- Thus, both the Buddhist and Hindu traditions intermingled and spread in the hills and that led to a unique style of architecture.

MCQs

1. What are "White Goods" in the context of consumer durables?
 - a) Communication devices
 - b) Large home appliances**

- c) Recycled goods
d) Refurbished appliances
2. Consider the following statements about the Gaza Strip:
1. It is situated on the Red Sea's eastern coast.
2. It has borders with Israel and Egypt.
3. It is the smallest of the two Palestinian territories, with the West Bank being the larger.
How many of the above statements are correct?
a) Only one **b) Only two** c) All three d) None
3. Mukundra Hills Tiger Reserve lies in:
a) Rajasthan b) Odisha c) Karnataka d) Arunachal Pradesh
4. Which one of the following services is provided under the Tele MANAS Seva?
a) Mental Health Counseling Services
b) Improvement of Telecommunication Technology
c) Monitoring of tigers in MANAS National Park
d) Transmission of satellite data through receivers
5. With reference to Dhole (*Canis lupus*), consider the following statements:
1. Dhole is primarily a herbivore.
2. The IUCN status for Dhole is critically endangered.
3. The Indian government sanctioned its first Dhole conservation breeding center in Visakhapatnam.
How many of the statements given above are correct?
a) Only one b) Only two c) All three d) None
6. With reference to International Coral Reef Initiative (ICRI), consider the following statements:
1. It is a global partnership between Nations and organizations that strives to preserve coral reefs and related ecosystems around the world.
2. India has played a pivotal role as a founding member of the initiative.
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. Regarding the Geographical Indication (GI) tag consider the following statements:
1. Geographical indications are recognized as a part of intellectual property rights (IPRs) under the Paris Convention and Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement.
2. India, as a World Trade Organisation (WTO) member, implemented the Geographical Indications of Goods Act, 1999.
3. Arunachal Pradesh has recently received the Geographical Indication (GI) tag for Arunachal Yak Churpi, Khaw Tai (Khamti rice), and Tangsa Textiles.
Which of the statements given above is/are correct?
a) 1 and 2 only b) 2 only c) 3 only **d) 1, 2 and 3 only**
8. Consider the following statements regarding Lakhpati Didi Initiative:
1. Its goal is to inspire women to develop micro-enterprises in their communities.
2. The Ministry of Rural Development is in charge of implementing it.
Which of the above statements is/are correct?
a) 1 only b) 2 only **c) Both 1 and 2** d) Neither 1 nor 2
9. Which one of the following best describes the 'Atlantic Puffin' seen in the news recently?
a) It is a type of penguin.
b) It is a small seabird.
c) It is a marine mammal.
d) It is a large predatory bird.
10. Consider the following statements regarding the Baiga tribes:
1. They perform Bewar, a type of shifting farming.
2. They are a particularly vulnerable tribal group in Karnataka.
Which of the above statements is/are correct?
a) 1 only b) 2 only c) Both 1 and 2 d) Neither 1 nor 2