



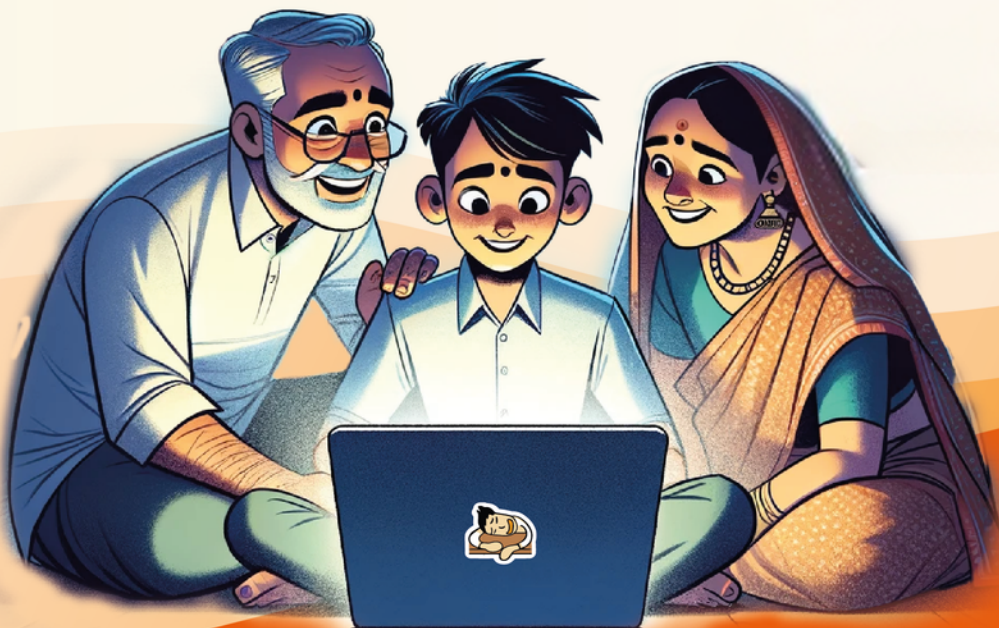
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UPSC MAINS

Solved PYQs

2024

General Studies Paper 1



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How to Maximize Your UPSC Mains Score Using These PYQs

Transform Your Preparation into Your Success Strategy

✗ "I solve PYQs but still struggle in mock exam"

Your Problem: You're treating PYQs like MCQs - solving for the sake of solving without strategic analysis.

Strategic Solution: After solving each question, spend 10 minutes analyzing: What was the examiner testing? Which keywords were crucial? How can I improve my answer structure? Create a "mistakes point list" to track recurring weaknesses.



"I can't finish questions within time limits"

Your Problem: You know the content but struggle with time management and answer structuring under pressure.

Time-Bound Practice: Set strict timers - 7 minutes for 10-mark questions, 12 minutes for 15-mark questions. Practice writing concise, impactful answers. Use bullet points and subheadings to save time while maintaining clarity.



"My answers lack depth and examples"

Your Problem: Your answers are generic and don't stand out among thousands of similar responses.

Content Enhancement: For each PYQ, create a "example bank" - collect 2-3 specific case studies, data points, or contemporary examples. Practice weaving these naturally into your answers to demonstrate comprehensive understanding.



"I don't know which topics to prioritize"

Your Problem: Without pattern analysis, you're studying everything equally instead of focusing on high-weightage areas.

Smart Analysis: Create a frequency chart of topics from last 7 years. Identify recurring themes and question patterns. Allocate 60% of your time to high-frequency topics, 40% to emerging trends. Also Sleepy Classes has a video on complete pattern analysis of UPSC mains.

⚠ Critical Mistake to Avoid

Don't just read solved answers and move on. The real learning happens when YOU attempt the question first, then compare with model answers to identify gaps.



Remember: PYQs are your blueprint, not just practice material

Every question tells you exactly what UPSC expects. Use this collection to decode the examiner's mindset, not just to test your knowledge. Your success lies in understanding the 'why' behind each question.

FREE - GS Mains PYQs Discussion

Date	Day	Topic	Year
02 June 2025	Monday	General Studies Paper 1	2024
03 June 2025	Tuesday	General Studies Paper 2	2024
04 June 2025	Wednesday	General Studies Paper 3	2024
05 June 2025	Thursday	General Studies Paper 4	2024
09 June 2025	Monday	General Studies Paper 1	2023
10 June 2025	Tuesday	General Studies Paper 2	2023
11 June 2025	Wednesday	General Studies Paper 3	2023
12 June 2025	Thursday	General Studies Paper 4	2023
16 June 2025	Monday	General Studies Paper 1	2022
17 June 2025	Tuesday	General Studies Paper 2	2022
18 June 2025	Wednesday	General Studies Paper 3	2022
19 June 2025	Thursday	General Studies Paper 4	2022
23 June 2025	Monday	General Studies Paper 1	2021
24 June 2025	Tuesday	General Studies Paper 2	2021
25 June 2025	Wednesday	General Studies Paper 3	2021
26 June 2025	Thursday	General Studies Paper 4	2021
30 June 2025	Monday	General Studies Paper 1	2020
01 July 2025	Tuesday	General Studies Paper 2	2020
02 July 2025	Wednesday	General Studies Paper 3	2020
03 July 2025	Thursday	General Studies Paper 4	2020

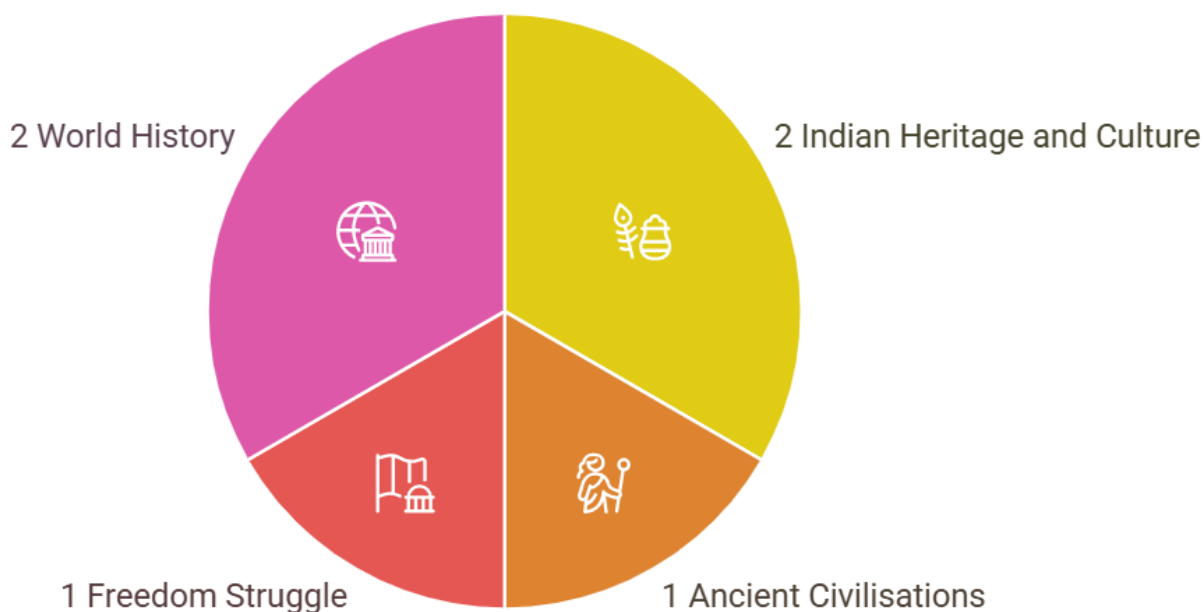
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GS - I

History, Art & Culture

Distribution of History, Art, and Culture Questions in Mains 2024 (questions)



Sr.no.	Question	Sub - Theme	Marks allotted, Word Limit
1	Underline the changes in the field of society and economy from the Rig Vedic to the later Vedic period.	Ancient History, Indian Vedic Period	10 Marks, 150 Words
2	What were the events that led to the Quit India Movement? Point out its results.	Freedom Struggle, Gandhian Phase	10 Marks, 150 Words
3	Estimate the contribution of Pallavas of Kanchi for the development of art and literature of South India.	Art and Culture, Pallava Period	10 Marks, 150 Words
4	"Though the great Cholas are no more yet their name is still remembered with great pride because of their highest achievements in the domain of art and architecture". Comment.	Art and Culture, Chola Period	15 Marks, 250 Words
5	How far is it correct to say that the First World War was fought essentially for the preservation of balance of power?	World History, World Wars	15 Marks, 250 Words

6	How far was the Industrial Revolution in England responsible for the decline of handicrafts and cottage industries in India?	Modern History, British Policies	15 Marks, 250 Words
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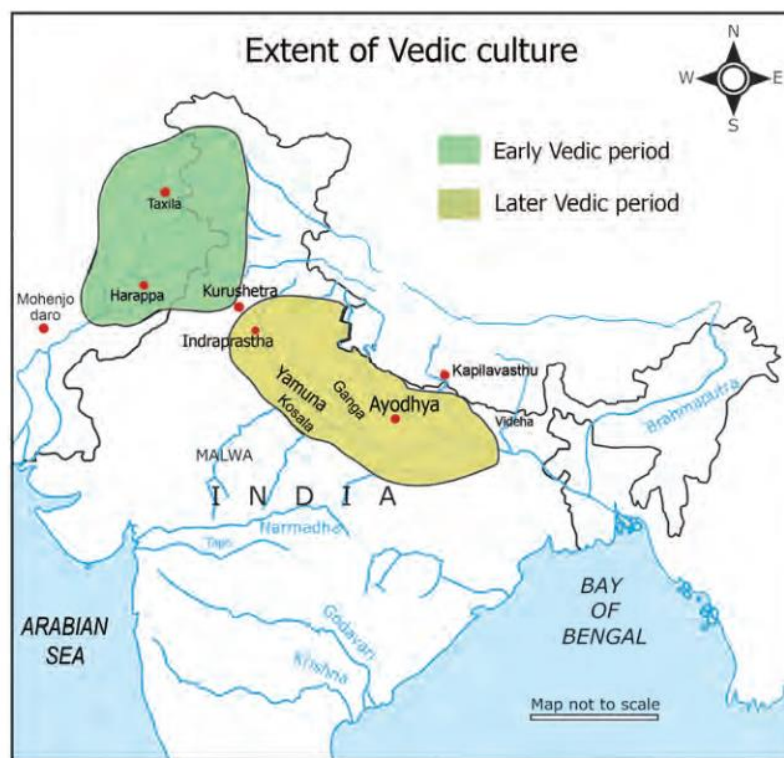
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Q.1 Underline the changes in the field of society and economy from the Rig Vedic to the later Vedic period. (10 Marks, 150 words)

- The **eastward migration of Aryans** into the fertile Gangetic plains, coupled with the **advent of iron (krishna ayas)**, led to major socio-economic shifts. The use of iron tools revolutionized agriculture, settlement patterns, and political institutions – transforming a **pastoral tribal culture into an agrarian and stratified society**.



Changes in Economy

Aspect	Rig Vedic Period	Later Vedic Period
Economic Base	Pastoral; cattle as wealth (Gomat, Duhitri, Gaveshana, 'Gopati, Godhuli, Gavyuti)	Agrarian economy emerged; land ownership gained importance
Agriculture	Subsidiary activity; barley cultivation	Primary occupation; rice (Vrihi) and wheat (Godhuma) cultivated
Technology	Copper tools; limited forest clearance	Iron tools enabled large-scale forest clearance and deeper ploughing
Crafts and Trade	Simple crafts; barter economy	Specialized crafts (metalwork, carpentry); signs of proto-urban trade
Settlements	Semi-nomadic tribal villages	Permanent villages; Rudimentary towns

Changes in Society

Aspect	Rig Vedic Period	Later Vedic Period
Social Stratification	Tribal and egalitarian; fluid varna system	Hierarchical; varna became rigid with Brahmins and Kshatriyas on top
Women's Status	Women had access to education; attended political assemblies (Sabha and Vidhata), Composed Vedic Mantras (Brahmavadini), No Child Marriage.	Decline in status; restricted from rituals and formal education, Child Marriage a common practice now, restrictions on widow remarriage, and not allowed to attend sabha.
Polity	Sabha and Samiti held power; chiefs guided by elders	Strong kingship; Vedic rituals used to legitimize power.
Religion	Nature worship (Indra, Agni, Varuna), Yajnas	Ritualism increased; deities like Prajapati, Vishnu, Rudra gained prominence, monopoly of the priestly class.

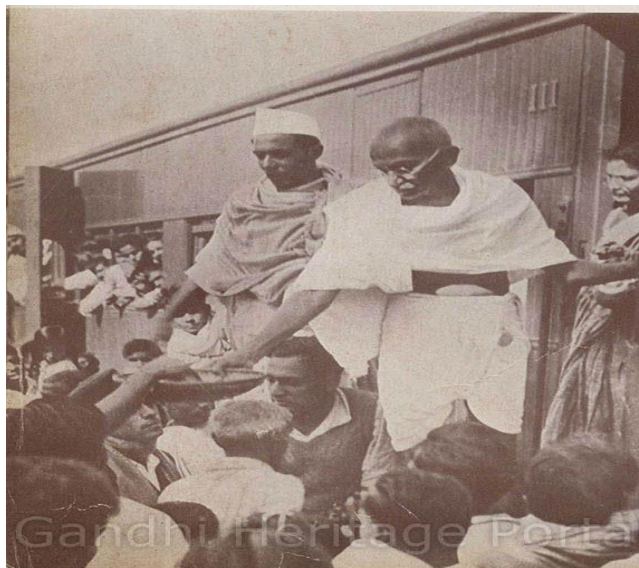
The Later Vedic period marked a decisive evolution towards **settled agrarian society and hierarchical social order**. The Iron Age acted as a technological catalyst for these transformations, setting the stage for the **emergence of Janapadas** and early kingdoms.

Q.2 What were the events that led to the Quit India Movement? Point out its results (10 Marks, 150 words)

Launched on **8 August 1942**, the Quit India Movement was a bold and uncompromising demand for **complete independence**. Rooted in deepening frustration with colonial policy during WWII, it marked a shift from dialogue to decisive resistance. **Gandhi's call of "Do or Die"** galvanized the nation into mass civil disobedience.

Events Leading to the Movement

- **WWII and India's Forced Involvement (1939–42):** India was made a war participant without consulting Indians, leading to mass disillusionment.
- **Failure of Cripps Mission (1942):** Offered dominion status post-war without immediate self-rule or control over defence – rejected by all major parties.
- **Economic Crisis:** Wartime inflation, food shortages, and forced recruitment caused distress.



- **Growing Mass Discontent:** Youth, workers, peasants, and women were radicalised by local struggles.
- **British Reverses in South-East Asia, Imminent British Collapse.**
- **Fall of Burma:** Japanese forces neared India; Fear of scorched earth policy by British in Assam, Bengal, Odisha in case of Japanese Invasion, public panic intensified the urgency for independence.
- **Global Context:** Allied rhetoric of fighting for freedom sounded hollow when Indians were denied the same.
- **Gandhi's Leadership Shift:** Frustrated with British indifference, Gandhi demanded immediate withdrawal.

Results of the Movement

- **Brutal Repression:** Over 90,000 arrests, including national leaders; press was censored.
- **Mass Nationalist Upsurge:** Despite no central coordination, the movement spread like wildfire across rural and urban areas.
- **Emergence of Parallel Governments:** Ballia (UP), Tamluk (Bengal), Satara (Maharashtra) witnessed temporary self-rule.
- **Underground Resistance:** Leaders like Ram Manohar Lohia, Aruna Asaf Ali, Usha Mehta operated secret radios and networks.
- **Radicalisation of Youth:** Led to increased militancy and later revolts like the **Royal Indian Navy (RIN) Mutiny (1946)**.
- **Changed British Outlook:** Saw governance without Indian consent as impossible.
- **Set Stage for Post-War Negotiations:** Weakened British position led to **Cabinet Mission Plan (1946)** and eventual independence.
- **Global Sympathy:** Anti-colonial sentiment grew internationally; Britain's credibility took a hit.

The Quit India Movement was the final mass struggle before independence. Though it faced severe suppression, the Quit India Movement reignited the national spirit, radicalised the masses, and moral eroded British authority, thus accelerating the collapse of colonial rule and laid the foundation for independence in 1947.

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Q.3 Estimate the contribution of Pallavas of Kanchi for the development of art and literature of South India. (10 Marks, 150 words)

- The Pallavas of Kanchi (4th–9th centuries CE) were **instrumental in shaping South India's cultural heritage**. Based in Kanchipuram, they fostered a rich legacy in various fields, including **architecture, sculpture, painting, music, dance, and literature**, which significantly influenced South Indian traditions for centuries.

Contributions to Art and Literature:

Art:

- Architecture:**
 - The Pallavas pioneered Dravidian temple architecture, transitioning from rock-cut to structural temples. Notable examples include the **Pancha Rathas** in Mamallapuram, which are monolithic shrines from the reign of **Narasimhavarman I**, and **Rajasimha's Shore Temple**, a **UNESCO World Heritage site**. These structures introduced **stepped vimanas**, which had a lasting impact on South Indian temple design.
- Sculpture:**
 - The Pallavas mastered both **stone and bronze** sculptures. The relief known as the **Descent of the Ganga at Mamallapuram** vividly depicts dynamic mythological scenes. Additionally, the **bronze figures of Shiva Nataraja**, characterized by their elegant proportions, inspired subsequent Chola artistry, blending **realism with spiritual symbolism**.
- Music and Dance:**
 - The Pallavas promoted classical music and dance as integral parts of temple rituals. Inscriptions from Kudumianmalai and Thirumayam detail musical notations, while sculptures in the Kailasanatha Temple illustrate poses from Bharatanatyam, indicating an early codification of South Indian performing arts. The Sivakamasundari panel in the Kailashanatha Temple portrays a graceful dancer, highlighting the sophisticated dance traditions nurtured by the Pallavas. Devotional hymns were also encouraged, with temple rituals often accompanied by vocal and instrumental performances.



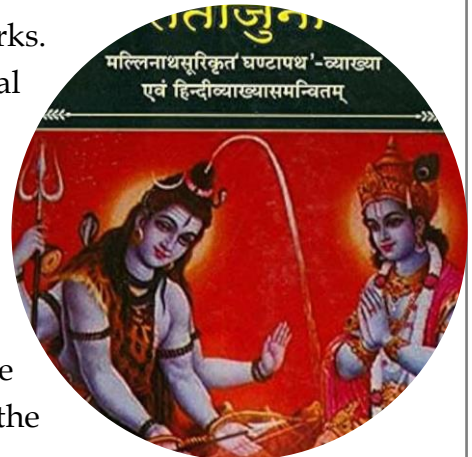
• Painting:

- The Pallavas were patrons of **mural painting**, with the **Sittanavasal Caves (7th century)** showcasing vibrant Jain-themed frescoes (Samavasarana) that depict lotus ponds and dancers. These colourful and fluid paintings not only reflect the aesthetic sophistication of the Pallavas but also influenced later Chola art.



Literature:

- The Pallavas supported both Tamil and Sanskrit literary works.
 - **Mahendravarman I's Mattavilasa Prahasana**, a satirical Sanskrit play, along with **Bharavi's epic Kiratarjuniya** and **Dandin's Kavyadarsa and Dasakumarcharita**, reflect the literary excellence of the period.
 - Additionally, **Bhakti hymns** such as the *Tevaram*, the *Alvars' Nalayira Divya Prabandham*, and the **Velurpalaiyam** plates enriched the literary traditions of the time.



Pallava Contributions to Art

Characteristic	Architecture	Sculpture	Painting	Music and Dance
 Key Achievements	Pioneered Dravidian temple architecture	Mastered stone and bronze sculptures	Patrons of mural painting	Promoted classical forms in temples
 Notable Examples	Monolithic Pancha Rathas, Mahabalipuram, Structural Temples - Shore Temple, Mahabalipuram	Descent of the Ganga, Mahabalipuram. Bronze Sculpture - Shiva Nataraja	Sittanavasal Caves - Jaina Samavasarana, frescoes	Kudumianmalai and Thirumayam inscriptions, Sivakamasundari panel in the Kailasanatha Temple - Bharatanatyam poses
 Lasting Impact	Influenced South Indian temple design	Inspired Chola artistry	Influenced later Chola art	Early codification of performing arts

Literary Excellence of the Pallava Period

Sanskrit Epics

Bharavi's
Kiratarjuniya and
Dandin's epic works
Dasakumaracharita,
Kavyadarsha.

2

Tamil Bhakti Hymns

Tevaram and Alvar's
Nalayira Divya
Prabandham

3

Sanskrit Plays

Mahendravarman I's
satirical play -
Mattavilasa
Prahasana

1

Velurpalaiyam Plates

Historical records on
copper plates

4

Literary
Excellence

The Pallavas' patronage of Dravidian temples, Sittanavasal paintings, and literary works like *Kavyadarsa* and *Kiratarjuniya* profoundly **shaped South India's cultural identity**. Their innovative blend of art and literature influenced later dynasties, leaving **a lasting legacy in India's heritage**.

Q.4 "Though the great Cholas are no more yet their name is still remembered with great pride because of their highest achievements in the domain of art and architecture" .Comment.
(15 Marks, 250 words)

- When world leaders gathered at Bharat Mandapam for the **G-20 Summit in 2023**, they were welcomed by a majestic bronze statue of **Lord Nataraja** – not just a sculpture, but a timeless symbol of India’s artistic soul. This masterpiece, rooted in the **legacy of the Cholas**, reflects an era when **art, devotion, and statecraft** flourished together. The Chola dynasty, reigning from the **9th to 13th century CE**, didn’t just build temples or cast idols—they shaped a cultural imagination that continues to move, inspire, and define India to this day.

Contribution to Art and Architecture

1. Temple Architecture

- Cholas gave a **definitive form to Dravidian temple architecture**.
- e.g **Brihadeshwara Temple** (Thanjavur, built by Rajaraja I, 1010 CE):
 - UNESCO World Heritage Site.
 - 216 ft high Vimana (shikhara) made from granite without mortar.
 - Massive Nandi monolith and axial layout symbolizing cosmic geometry.
- Gangaikonda Cholapuram Temple** (Rajaraja Chola’s successor, Rajendra I):
- Airavatesvara Temple** (Darasuram, Rajaraja II).



2. Sculpture and Bronze Art

- Cholas excelled in **bronze casting using the lost-wax technique** (Cire Perdue).
- The **Nataraja (cosmic dance of Shiva)** became a cultural symbol – dynamic yet balanced, spiritual yet technical.
- Temple walls depict vivid and expressive sculptures of gods, devotees, and dancers.



3. Painting

- Though few Chola paintings survive, **frescoes in Brihadeshwara Temple** show vibrant scenes from Hindu mythology.
- Influenced later Nayaka and Vijayanagara mural traditions.

4. Music and Dance

- Temples functioned as **cultural hubs** for Bharatanatyam and Carnatic music.
- Devadasi system**, though controversial later, originated in this period and preserved dance traditions.

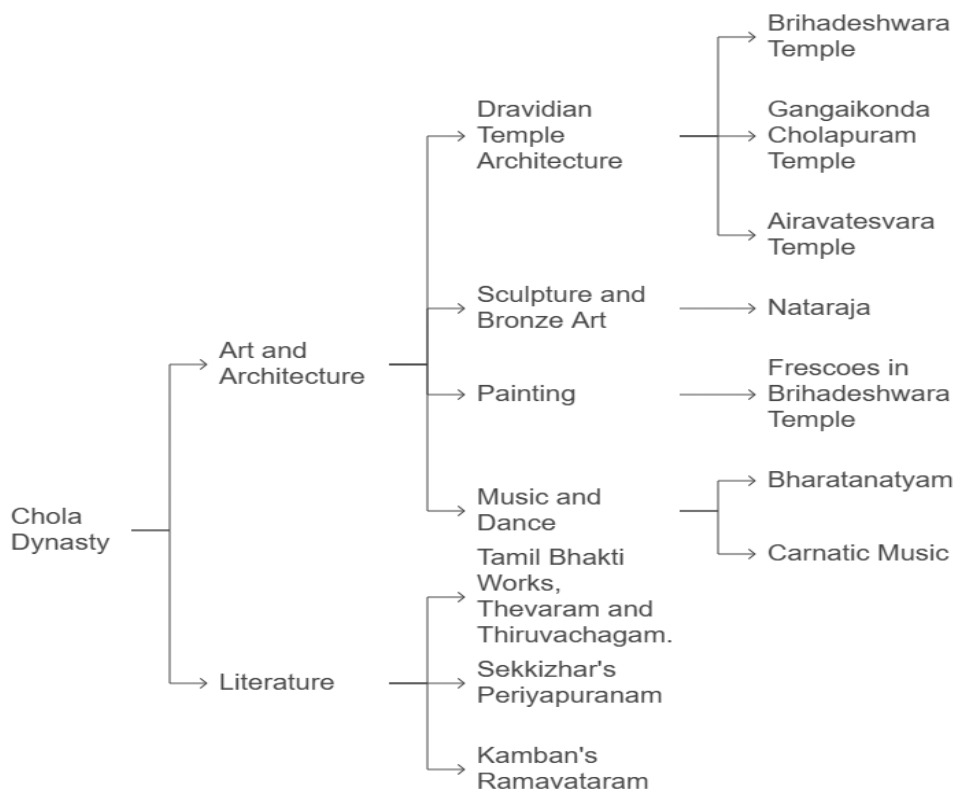
- Cholas supported **temple orchestras**, with inscriptions detailing instruments and musicians' roles.

5. Contribution to Literature

- Literature flourished in **both Tamil and Sanskrit**.
- Tamil Bhakti works**, especially **Thevaram** and **Thiruvachagam**, were revived, compiled, and set to music in temples.
- Sekkizhar's Periyapuramam** (12th century): Biographies of 63 Nayanmars, composed in royal courts.
- Kamban**, the greatest Tamil poet of the period, composed the **Ramavataram (Kamban Ramayanam)**, a retelling of Valmiki's Ramayana in Tamil, blending **Bhakti, classical aesthetics, and Dravidian ethos**.



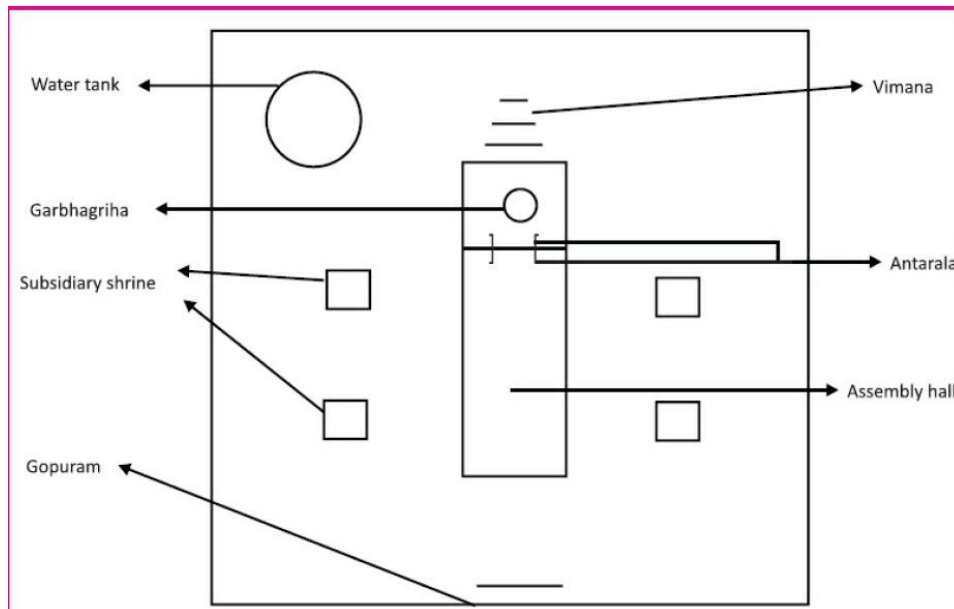
Chola Dynasty's Cultural Contributions



The main features of Dravidian style of temple architecture are:

- The Dravida temple is enclosed within a **compound wall**.
- The front wall has an entrance gateway in its centre, which is known as a **Gopuram**.
- The shape of the main temple tower known as **vimana in Tamil Nadu is like a stepped pyramid** that rises up geometrically rather than the curving shikhara of North India.

- In the South Indian temple, the word '**shikhara**' is used only for the **crowning element at the top of the temple** which is usually shaped like a small stupika or an octagonal cupola – this is equivalent to the amalaka and kalasha of North Indian temples.
- **Fierce Dvarapalas or the door-keepers** guarding the temple adorn the entrance to garbhagriha
- It is common to find a large water reservoir, or a temple tank, enclosed within the comp



The Cholas may have disappeared from the political landscape centuries ago, but their legacy lives on in stone, bronze, literature, and rhythm. **Their artistic vision combined technical mastery with spiritual depth**, influencing South Indian culture for generations. As seen in **UNESCO heritage recognitions and the global reverence for Nataraja bronzes**, the Cholas continue to inspire pride and admiration in the modern world.

Q.5 How far was the Industrial Revolution in England responsible for the decline of handicrafts and cottage industries in India? (15 Marks, 250 words)

- The Industrial Revolution in England, beginning in the 18th century, triggered massive industrial and economic growth in Britain, positioning it as a **global manufacturing hub**. However, this transformation had devastating consequences for India's flourishing handicrafts and cottage industries. The **influx of cheap machine-made British goods, supported by exploitative colonial policies**, led to **rapid deindustrialization** and **socio-economic displacement** of Indian artisans, weavers, and craftsmen.

Impact of the Industrial Revolution on Indian Handicrafts

1) Influx of Cheaper, Machine-made Goods

- Indian handmade textiles like the Dacca muslin and Bengal silk failed to compete and suffered heavy decline.

2) Tariff and Trade Discrimination – One - Way Free Trade Policy

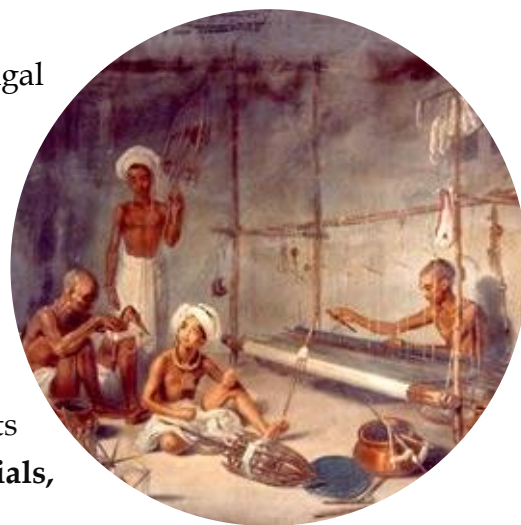
- Indian textiles faced heavy **import duties in Britain (up to 70-80%)**, while British goods entered India **duty-free or very low duty (2.5%)**.

3) (1) and (2) led to collapse of Domestic and Export Markets of India **and reduced India to a supplier of Raw Materials, cotton, indigo etc.**

- Once a major textile exporter, India saw a 300% rise in raw cotton exports but a corresponding collapse in its finished goods exports. Export of cotton textiles fell from 33% share in world market in 1811 to less than 3% by 1851.
- Also, local weavers struggled due to rising raw material prices.

4) Displacement of Artisans and Deindustrialization of India -

- Entire classes of artisans—like **weavers, dyers, and metalworkers**—lost their livelihoods. Many forced into agriculture or wage labour, often in British-owned industries.
- India's share in world manufacturing dropped from 27% in 1750 to 2% in 1900.
- The phenomenon of "**deindustrialization**", as emphasized by R.C. Dutt and later Bipan Chandra, was not natural but **colonially induced**.



Other Contributing Factors Beyond the Industrial Revolution

- **Lack of Modernization in Indian Industry**
 - Indian handicrafts lacked **capital, technology, and state support** to modernize and compete with British goods.
 - The colonial state did **not foster indigenous industrialization** – unlike Japan's Meiji reforms.
- **Collapse of Patronage**
 - The decline of **Mughal and princely courts** under British dominance ended royal commissions.
 - Irfan Habib notes that this **cut off a major source of financial and cultural support** for luxury handicrafts.
- **Disruption of Traditional Institutions**
 - The **rural economy** suffered under revenue settlements (Permanent Settlement, Ryotwari), reducing demand for luxury crafts.
 - The **money economy and commercialization of agriculture** changed consumption patterns, affecting artisan markets.
- **Absence of Protectionist Policies**
 - Unlike Germany or the U.S., India had **no protective tariffs** to shield domestic industries.
 - The lack of industrial policy under colonial rule left artisans **vulnerable to global competition**.
- **Railways and Market Penetration**
 - The introduction of **railways (post-1853)** allowed cheap British goods to reach rural India.
 - As Bipan Chandra observed, this **integrated the colonial economy**, displacing local crafts even in remote villages.
- **Shift in Consumer Preferences:**
 - Cheaper British products led Indian consumers to abandon local products. Even elites began wearing **Manchester cottons over traditional Chanderi or Banarasi silks**.

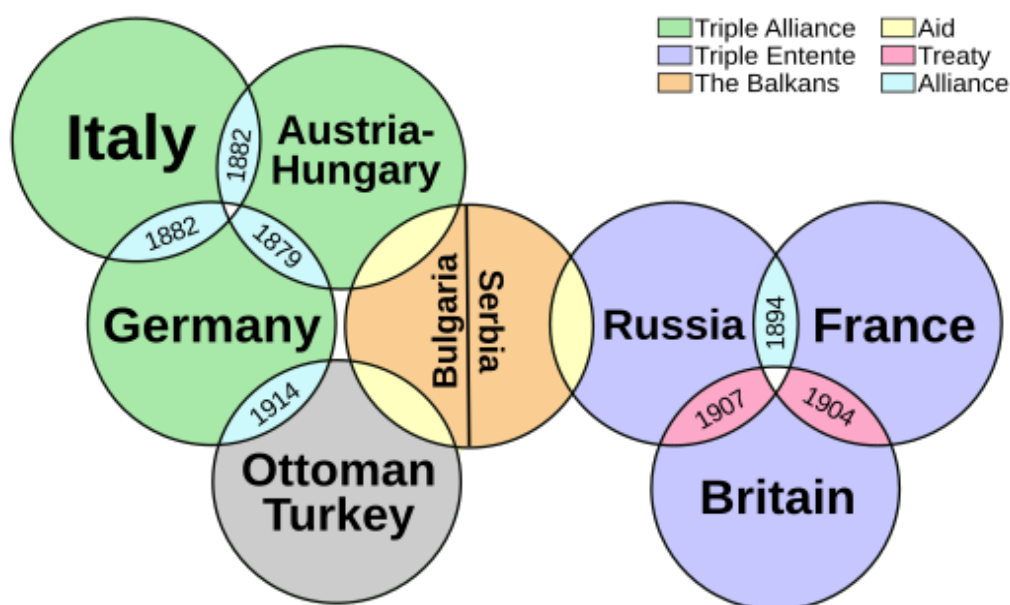
The Industrial Revolution in England, aided by colonial trade policies, was a principal factor in the decline of India's handicrafts and cottage industries. The long-term damage reshaped India into a raw material supplier and left millions of artisans impoverished and disenfranchised.

Q.6 How far is it correct to say that the First World War was fought essentially for the preservation of balance of power? (15 Marks, 250 words)

- The **First World War (1914–1918)** was not merely a war of empires—it was also a war to **maintain the fragile balance of power in Europe**. While this motive shaped alliance-building and diplomatic posturing, the war's outbreak was equally driven by **militarism, nationalism, imperial rivalries, and systemic failures**.

Balance of Power as a Key Factor

- The balance of power system, aimed at preventing any one nation from becoming dominant, had governed European diplomacy since the **Congress of Vienna (1815)**.
- The rise of Germany as an industrial and military powerhouse after unification in 1871 threatened the existing equilibrium.
- Britain, traditionally committed to preventing continental dominance by any single power, viewed **Germany's naval expansion and colonial ambitions** as direct threats.
- The formation of two rival blocs—the **Triple Entente (France, Russia, Britain)** and the **Triple Alliance (Germany, Austria-Hungary, Italy)**—reflected efforts to counterbalance rising power centers.

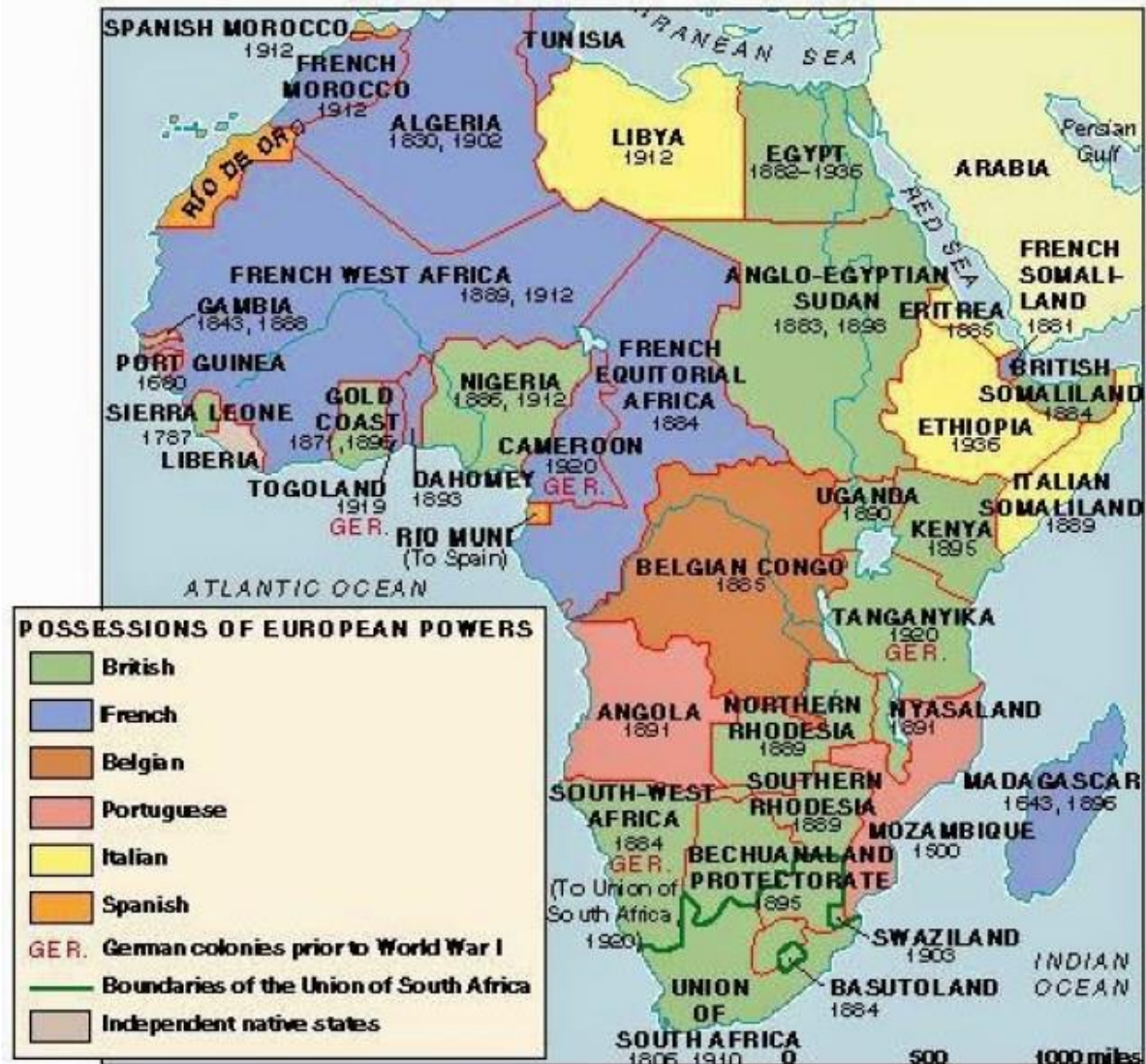


Imperialism and Economic Rivalry

- Beyond continental balance, there was a fierce **competition for colonies and markets**.
- Britain and France clashed with Germany over African and Asian territories (e.g., the **Moroccan Crises, 1905-06, 1911**).
- Germany's quest for a "place in the sun" disrupted the status quo, leading to diplomatic isolation and increased friction.

Nationalism and Balkan Instability

- Balkan nationalism, especially **Serbian irredentism**, clashed with Austro-Hungarian imperial interests.
- Arjun Dev notes that the Balkans became a “powder keg,” where local grievances escalated into pan-European hostilities due to alliance obligations.



Militarism and Arms Race

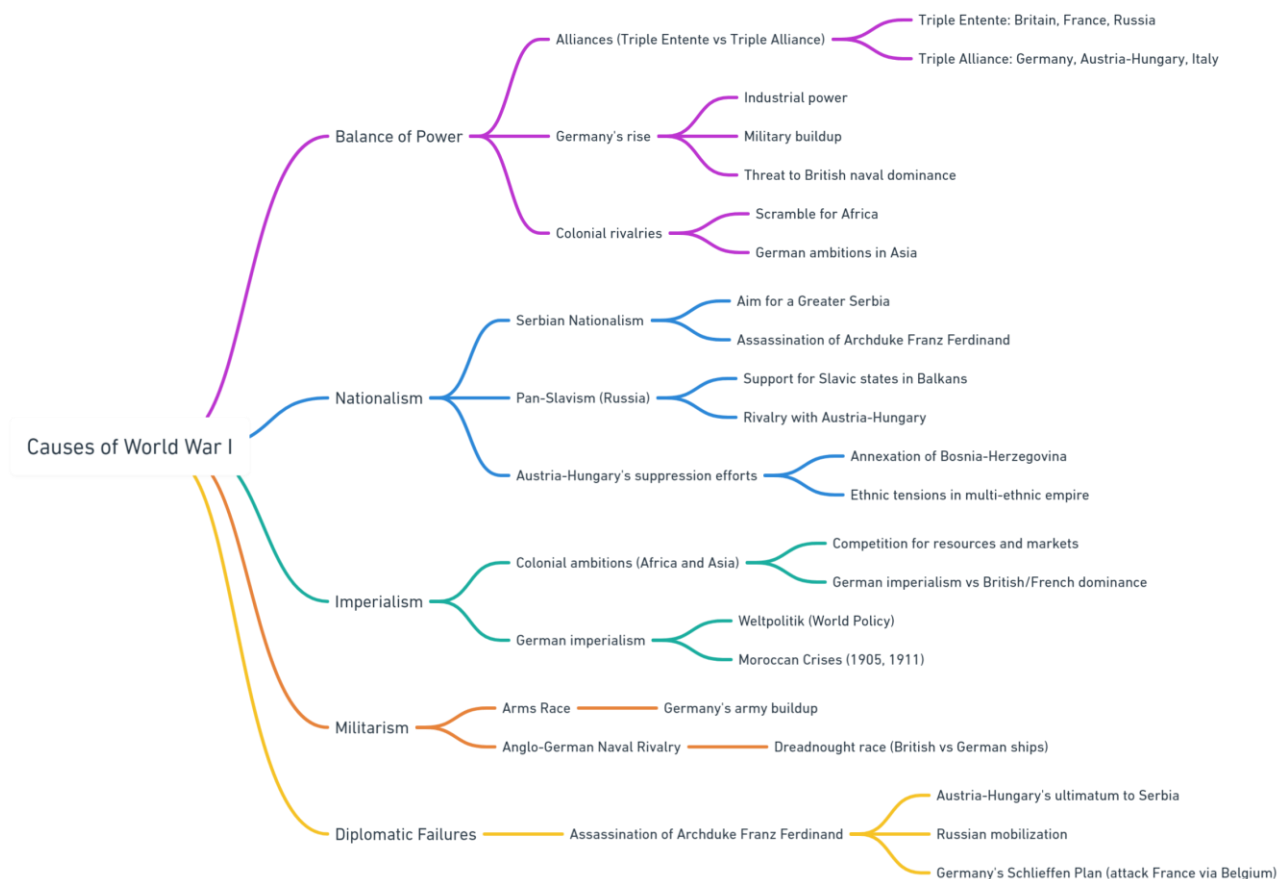
- The late 19th and early 20th centuries saw **unprecedented military build-up** - Tanks, M/C guns, Liquid fire, Submarines (U - Boats) Propaganda, particularly between Germany and Britain's naval forces.
- The glorification of military power, coupled with detailed war plans like Germany's **Schlieffen Plan**, turned any conflict into total war once triggered.

The Alliance System and Its Fragility

- The web of alliances, though meant to deter war, made the conflict **inevitable once a local crisis emerged**.

- The **assassination of Archduke Franz Ferdinand in Sarajevo** (1914) set off a chain reaction, with nations upholding alliance obligations under the guise of maintaining balance.
- **Austria-Hungary's aggression against Serbia, supported by Germany, provoked Russia's intervention** and, consequently, the involvement of France and Britain.

While maintaining the balance of power was an important goal, the First World War was also driven by rising nationalism, aggressive militarism, imperial ambitions, and deep mistrust among European powers. Countries weren't just trying to keep peace – they were also preparing for war. As historians like Norman Lowe suggest, it was not one cause but a mix of fears, pride, and miscalculations that turned a tense Europe into a battlefield.



Made with Whimsical

Social Issues and Indian Society

Question listing

S.No.	Question	Sub Theme	Marks
1	Distinguish between Gender Equality , Gender Equity and Women empowerment. Why is it important to take Gender concerns into account in Program design and Implementation	Women Related Issues	10 marks, 150 words
2	Inter-caste marriages between castes which have socio economic parity have increased, to some extent, but this is less true of interreligious marriages. Discuss.	Caste	10 marks, 150 words
3	In dealing with socio-economic issues of development , what kind of collaboration between government, NGO's and private sector would be most productive?	Social Empowerment	10 marks, 150 words
4	What is Regional Disparity ? How does it differ from Diversity? How serious is the issue of regional disparity in India ?	Regionalism	15 marks, 250 words
5	Despite comprehensive policies for equity and social justice, underprivileged sections are not yet getting the full benefits of affirmative action envisaged by the Constitution. Comment	Social Empowerment	15 marks, 250 words
6	Globalisation has increased urban migration by skilled, young, unmarried women from various classes. How has this trend impacted upon their personal freedom and relationship with family ?	Globalisation and Impact	15 marks, 250 words
7	Critically analyse the proposition that there is a high correlation between India's cultural diversities and socio-economic marginalities.	Salient Features of Indian Society	15 marks, 250 words
8	What is the concept of a 'demographic winter'? Is the world moving towards such a situation? Elaborate.	Population Related Issues	15 marks, 250 words

Q. 1 Distinguish between Gender Equality , Gender Equity and Women empowerment. Why is it important to take Gender concerns into account in Program design and Implementation. (10 marks, 150 words)

PYQ Precedent

S.No.	Question	Year
1	Explain why suicide among young women is increasing in Indian society	2023
2	Empowering women is the key to control population growth.” Discuss	2019
3	What are the continued challenges for women in India against time and space?	2019
4	‘Women’s movement in India has not addressed the issues of women of lower social strata.’ Substantiate your view.	2018
5	How does patriarchy impact the position of a middle class working woman in India?	2014
6	Why do some of the most prosperous regions of India have an adverse sex ratio for women? Give your arguments	2014
7	Discuss the various economic and socio-cultural forces that are driving increasing feminization of agriculture in India.	2014

Introduction –

Gender Equality- Remove Discrimination –Equal property rights, Equal pay for Equal Work, girl child

Gender Equity – Special Provisions for Women to make the starting point same- Maternity Leave, Women Reservation in government jobs, KIRAN Scheme-women in STEM

Women Empowerment- promotion of self worth and ability to change society- Lakhpati Didi-SHG led development, Women entrepreneurship,

How it can be achieved (Diagram) Government action, role models, positive reinforcement, sensitization

Importance of gender based policy making

Numerical +Invest in health and education by IMF studies+ Influential family role +Society is insensitive-Safety issue+Inclusive growth

Empowerment

- **Definition 1**

- Women empowerment is the promotion of women's sense of self-worth, their ability to determine their own choices and their right to influence social change for themselves and others.

- **Definition 2**

- Women empowerment means emancipation of women from the vicious grips of social, economical, political, caste and gender-based discrimination. It means granting women the freedom to make life choices.
- Inter religious - anti conversion + cultural differences - Indian culture - UCC + REGIONAL DIVIDE

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Q. 2 Inter-caste marriages between castes which have socio economic parity have increased, to some extent, but this is less true of interreligious marriages. Discuss. (10 marks, 150 words)

Introduction -Caste and Religion in Indian Society-Two determinants of social action

Inter-caste marriage numbers - NCAER - Total 5%, some surveys say 10% - Impact of modernization and urbanization + Education + Employment + govt incentives + special marriage act + Impact of Media/Cinema + Supreme Court judgements (Shafin Jahan case) + Means of mobility + Migration (call centres, corporate workplaces)

Headwinds to inter-caste and inter religious marriages :

Social boycott and ostracization + Honour killing + Social Patents + Anti conversion laws + Familial adjustments + Cultural Uniqueness + Religiosity as part of society + Different Personal Laws

Conclusion : Inter-caste marriages are not a tool to bring about equality, rather they are an outcome of the fading of lines that divide society. If there is more equality these artificial barriers will automatically fall apart and there will be more intermingling.

PYQ Precedent

S.No.	Question	Year
1.	Do you think marriage as a sacrament is losing its value in Modern India?	2023
2.	Why is caste identity in India both fluid and static?	2023
3.	Has caste lost its relevance in understanding the multicultural Indian Society? Elaborate your answer with illustrations	2020
4.	Caste system is assuming new identities and associational forms. Hence, caste system cannot be eradicated in India." Comment.	2018

Q.3 In dealing with socio-economic issues of development, what kind of collaboration between government, NGO's and private sector would be most productive? (10 marks, 150 words)

Development - India dichotomy of economic growth but lack of development - GDP and rank in HDI/GII/GGPI

To fill the gap -Three pronged efforts needed

Government + Private Sector - Pfizer Vaccine rollout+NHDP+IBM Smart Cities Challenge+National Skill Development Corporation

Government + NGO - Akshay Patra for MDM + Kerala - model state +Slum area development +MKSS

Private Sector+NGO - Tata Trusts and Google India- INTERNET Saathi+Pepsico and Water aid India - Water Conservation projects+ITC - e Chaupal

Relation is symbiotic, synergetic and Supplementary.

PYQ Precedent - GS2 Governance

S.No.	Question	Year
1.	Can Civil Society and Non-Governmental Organizations present an alternative model of public service delivery to benefit the common citizen? Discuss the challenges of this alternative model.	2021
2.	"In the Indian governance system, the role of non-state actors has been only marginal." Critically examine this statement.	2016
3.	Examine critically the recent changes in the rule governing foreign funding of NGOs under the Foreign Contribution (Regulation) Act (FCRA), 1976.	2015
4.	How can be the role of NGOs be strengthened in India for development works relating to protection of the Environment? Discuss throwing light on the major constraints	2015

Q. 4 What is Regional Disparity ? How does it differ from Diversity? How serious is the issue of regional disparity in India ? (15 marks, 250 words)

Introduction – India's 1.3 billion people speak 700+ languages, practice six major faiths, and belong to a variety of castes, but they are unified as one nation. This is diversity. The richest 1% owns 40.5% of the nation's wealth, while the lowest 50% owns only 3%, demonstrating how inequities, rather than diversity, could undermine national unity.

Body Part 1 : Table on next page

Body Part 2 : How Serious is the problem ?

Historical + Migration + Geographical Factors + Economic Overheads + Location Specific Advantages + Failure of Planning Mechanisms

Conclusion : Decentralisation + Devolution + DONER

Regional Disparity	Regional Diversity
Disparity creates migration –forced migration	Diversity creates vibrant culture
Disparity creates son of the soil syndrome/xenophobia	Diversity adds to variety of social experience
Disparity hampers infrastructure development	Diversity is good model for tourism and soft power
Disparity discourages private sector	Diversity represents richer cohesion
Disparity creates socio-religious tensions	Diversity provides wisdom of disparate cultures –Tribal Knowledge systems
Gives rise to regionalism/parochialism	

Seriousness of the Issue

- **Social Disparity** : India's regional development continues to reflect stark contrasts across educational, health, economic, and infrastructural indicators. **Kerala**, with its impressive **96.2% literacy rate** and **Human Development Index (HDI) of 0.79**, stands as a benchmark for human development in India. In contrast, **Bihar** still struggles with a **70.9% literacy rate** (Census 2011) and an **infant mortality rate (IMR) of 35 per 1,000 live births** (SRS 2020), far higher than Kerala's IMR of 6.
- **Economic Disparity** : By March 2024, **five southern states** were contributing nearly **30% to India's GDP**, whereas **Uttar Pradesh** and **Bihar** accounted for only **9.5%** and **4.3%**, respectively. This unequal distribution of economic output highlights the widening regional economic chasm.
- **Cultural and Linguistic Disparity** : Social unrest on language issue in certain southern states.
- **Developmental Disparity** : While the western and southern regions enjoy robust industrial bases and well-developed logistics networks, northeastern states remain isolated due to weak infrastructure and limited connectivity, impeding their integration into national markets.
- **Intra State Disparity** : . Vidarbha, a region in Maharashtra, faces a persistent agrarian crisis driven by factors such as poor irrigation, credit inaccessibility, and volatile markets, leading to alarming rates of farmer suicides. This situation stands in sharp contrast to the relatively prosperous farming conditions in western Maharashtra, where better infrastructure and institutional support prevail.

PYQ Precedent – Regionalism

S.No.	Question	Year
1.	Do you agree that regionalism in India appears to be a consequence of rising cultural assertiveness? Argue.	2020
2.	What is the basis of regionalism? Is it that unequal distribution of benefits of development on regional basis eventually promotes regionalism? Substantiate your answer.	2016
3.	Has the formation of linguistic states strengthened the cause of Indian unity	2016
4.	Growing feeling of regionalism is an important factor in the generation of demand for a separate state. Discuss.	2013

Q. 5 Despite comprehensive policies for equity and social justice, underprivileged sections are not yet getting the full benefits of affirmative action envisaged by the Constitution. Comment (15 marks, 250 words)

WHY POLICIES ARE NOT IMPLEMENTED

ABCDEF

- **Awareness - Example:** Many rural beneficiaries were unaware of how to register for *Ayushman Bharat*, limiting their access to free healthcare.
- **Bureaucracy/behaviorial** - *Swachh Bharat Mission* saw funds released for toilet construction, but **lack of follow-up** and **resistance to behavioural change** led to continued open defecation in many areas.
- **Centralisation/coordination** - The *Namami Gange Mission* suffers due to overlapping jurisdiction of central and state bodies, creating coordination bottlenecks.
- **Decentralisation** - Urban local bodies are often **dependent on state approvals** for implementing Smart Cities projects, reducing responsiveness.
- **Executive - capacity/capability/sensitivity** - Under *POSHAN Abhiyaan*, many Anganwadi workers lack proper training and digital literacy to use smartphones for tracking malnutrition.
- **Funds** - Many *PMAY (Gramin)* beneficiaries face delays in receiving instalments for housing construction.

Q. 6 Globalisation has increased urban migration by skilled, young, unmarried women from various classes. How has this trend impacted upon their personal freedom and relationship with family ? (15 marks, 250 words)

How globalization increase urban migration – young skilled unmarried women from various classes

- Services Industry – IT/Call Centres
- Social Media
- Popular Media
- Education and Online Courses
- Employment opportunities – Skills-cooking, beauty industry, textile industry, Fast Food outlets.
- Gig Economy

Impact on Personal Freedom- positive

- Rented accomodations
- Lesser Restriction on movement
- Live in relationships
- Higher Education opportunities
- Delayed Marriages

Impact on Personal Freedom- negative

- Safety- crime against women
- Workplace discrimination-informal work-long working hours
- Mental health and suicide- EY employee death in Pune (UPSC PYQ)

Impact on family relations

- Increased empowerment as breadwinner of family –Remittance providers
- Increased Respect in community
- DINK
- Weekend parenting
- Choice of life partner-assertion
- Distance and detachment
- Neolocal families

Q. 7 Critically analyse the proposition that there is a high correlation between India's cultural diversities and socio-economic marginalities.

(15 marks, 250 words)

Cultural Diversity and Socio Economic Marginalisation- Positive Correlation

- Caste - Dominant caste - SC/ST not at top positions
- Patriarchy - male female hierarchy
- Linguistic chauvinism- Erosion of tribal languages , son of the soil syndrome
- Hill versus Valley - Manipur - Within region
- Food habits -Non vegetarianism debate, Food choices
- Dress - Mocking of dressing habits-north south divide

Cultural Diversity and Socio Economic Marginalization- Inverse/ weak/ no Correlation

- Linguistic Diversity-Celebrated in constituted, EK Bharat Shreshta Bharat + AI /translation may help in restoring lost languages
- Geographical diversity- Technology, means of transport and communication have reduced gaps,
- Culinary Diversity- Celebrated+ Multiple cuisine+Tourism based growth+GI tags - Red ant chutney, rasgulla, etc
- Art and Culture - Tourism opportunity+intangible heritage +Soft power

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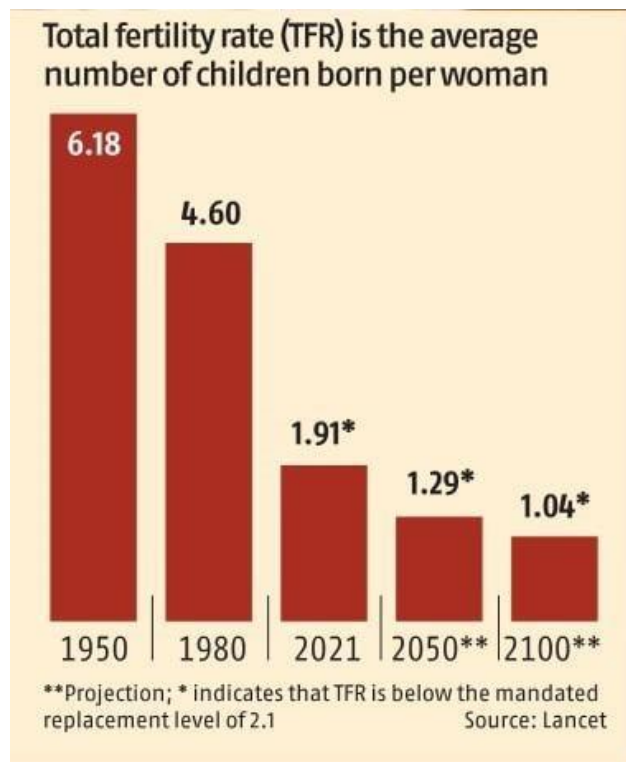
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Q. 8 What is the concept of a 'demographic winter? Is the world moving towards such a situation? Elaborate.

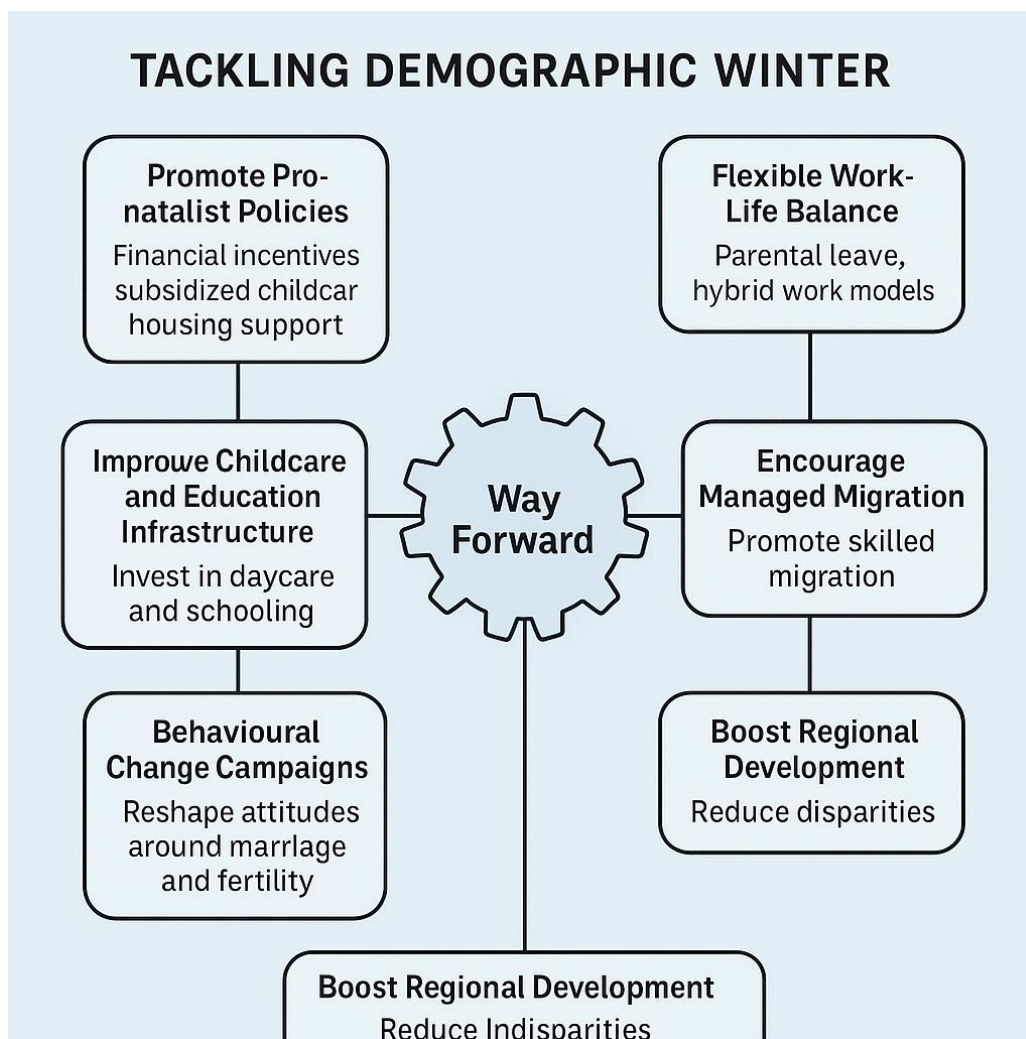
- **Concept** - The demographic winter refers to a worldwide decline in birthrates.
- Is World moving towards such situation ?
- **Yes** - Demographic statistics released by the Ministry of Health, Labor, and Welfare show that in 2023 the total fertility rate, indicating the number of children a woman has in her lifetime, fell for the eighth consecutive year in Japan to a record low of 1.20, a year-on-year decrease of 0.06 points.
- **No** - Niger has the highest fertility rate in the world, with a total fertility rate (TFR) of almost 7 children per woman. The next highest fertility rates are in Chad, the Democratic Republic of the Congo, and Somalia, all with a TFR of 6.0 children per woman.
- **Challenges** - Economic Impact + Political Changes + Policy and Governance Challenges + Cultural Impact



Introduction : Demographic winter refers to situation in which a country or region faces a decline in population which is prolonged. This could be due to low fertility rates, aging populations and/or increased mortality.

Causes to Wonder : Fertility rate drops + 10 percent population of world above 65 years + certain countries : **Japan** (Japan's population has been declining since 2011, with a fertility rate of 1.34 and more than 28% of its population aged 65 or older.), **South Korea**, **western Europe** + **Exceptions :** West Africa and other regions

Way forward and conclusion : diagram on next page



GEOGRAPHY

Q.1 What is sea surface temperature rise? How does it affect the formation of tropical cyclones? 10 marks (150 words)

Structure

- Introduction – sea surface temperature rise
- Causes of sea surface temperature rise
- Impact on Tropical Cyclone Formation
- Conclusion

Note – Add Value addition examples

Define sea surface temperature rise

Sea Surface Temperature (SST) rise refers to the increase in the ocean's surface temperature primarily due to global warming and climatic anomalies.

Note – Relevant Data

- Sea surface temperature increased during the 20th century and continues to rise. From 1901 through 2023, temperature rose at an average rate of 0.14°F per decade.
- The average global sea surface temperature (SST) – the temperature of the water at the ocean surface – for February 2024 stood at 21.06 degree Celsius, the highest ever in a dataset that goes back to 1979, the Copernicus Climate Change Service (C3S) said on March 5. The previous record of 20.98 degree Celsius was set in August 2023.

Causes of sea surface temperature rise

- Increased atmospheric temperatures
- Ocean absorbs heat
- Human activities
- El Nino
- Less dust blowing off the Sahara Desert recently due to weaker-than-average winds
- Structure connecting point - These rising sea surface temperatures act as a catalyst for the development and strengthening of tropical cyclones.

Causes of Sea Surface Temperature Rise

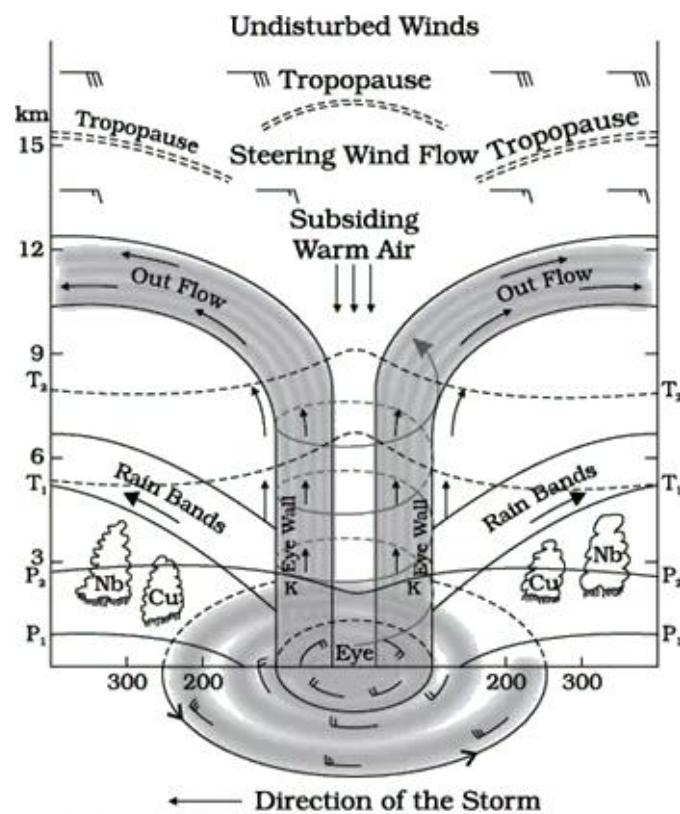
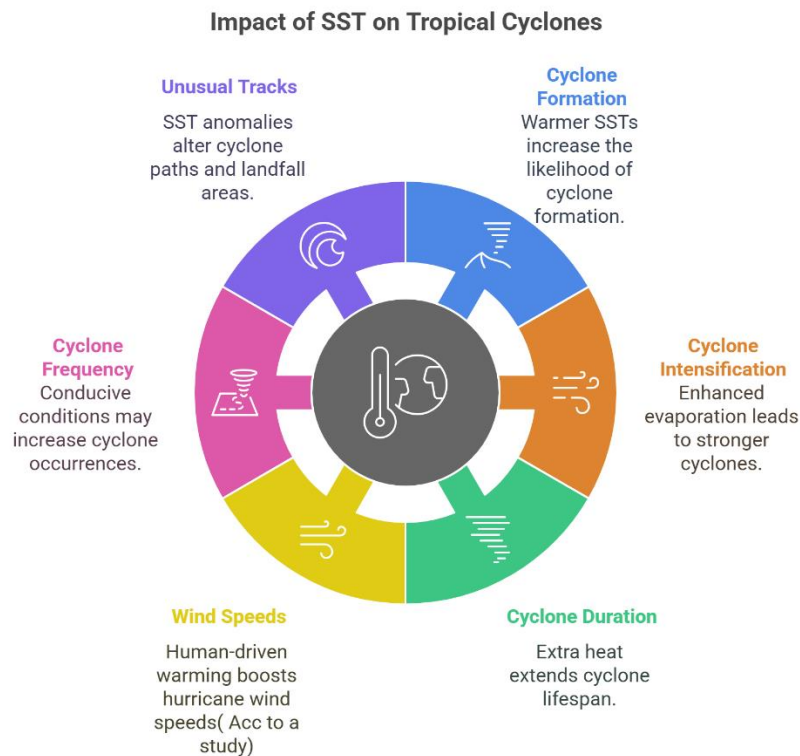


Fig: Vertical section of the tropical cyclone

Effect the formation on Tropical Cyclones

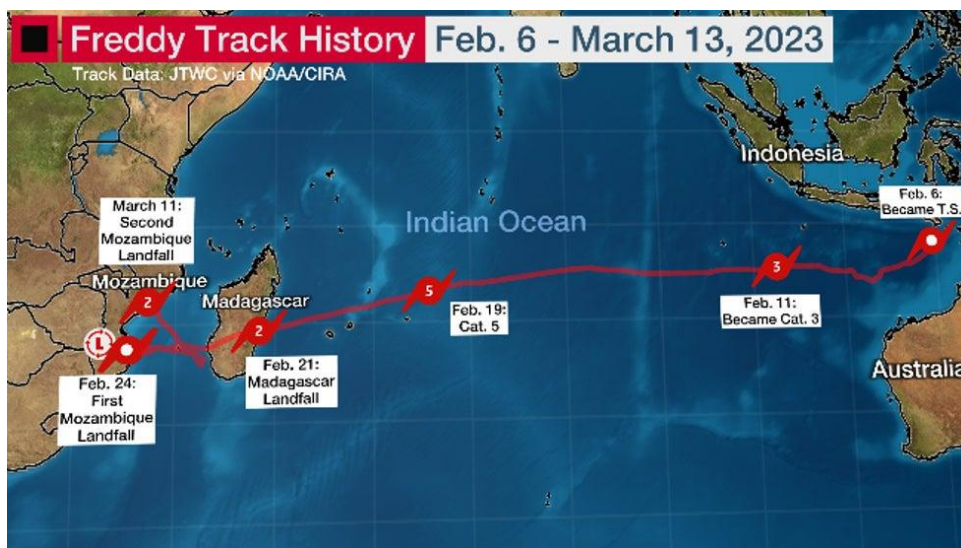
- **Fuel for Cyclones:** SSTs above 27°C provide the heat energy needed for cyclone formation increases likelihood for more Tropical cyclones.
- **Intensification:** Warmer SST enhances evaporation → more moisture(condensation) → increased latent heat → intensification.
- **Duration of the cyclone:** Warmer ocean waters supply extra heat energy, enabling tropical cyclones to maintain their intensity for extended durations.
- **Cyclone frequency & seasons:** Warmer SSTs may create more conducive conditions for cyclone formation.
- **Unusual Tracks:** SST anomalies may alter cyclone paths and landfall areas.
- **Wind Speeds:** Maximum wind speeds of hurricanes between 2019 and 2023 were boosted by an estimated 19mph (30km/h) on average as a result of human-driven ocean warming, according to a recent study.



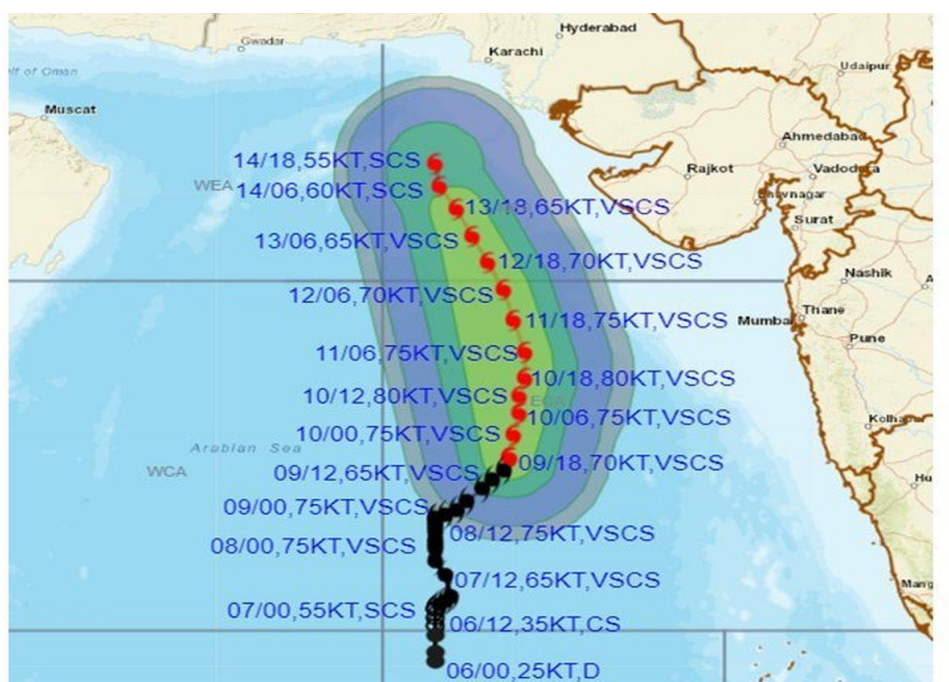
Value Addition

- Examples –
 - **Freddy Cyclone** - The World Meteorological Organization (WMO) has confirmed that cyclone Freddy which holds the record for the longest-lived tropical cyclone on record.
 - **Arabian Sea is transforming into a New Cyclonic Hotbed** - Sea surface temperatures in the Arabian Sea have increased rapidly during the past century due to global warming.
 - **Cyclone Amphan**: A considerable rise in SST ($>32^{\circ}\text{C}$) in the southern Bay of Bengal contributed to the formation of super cyclone Amphan

Freddy Cyclone



Arabian Sea is transforming into a New Cyclonic Hotbed



Conclusion

- SST rise, driven by climate change, is intensifying tropical cyclones in strength, frequency, and duration, posing severe risks to coastal regions and demanding urgent climate resilience and mitigation efforts.

Theme – Tropical Cyclones

- Discuss the meaning of colour-coded weather warnings for cyclone-prone areas given by the India Meteorological Department.(2022)
- The recent cyclone on the east coast of India was called “Phailin”. How are tropical cyclones named across the world? Elaborate. (2013)

Theme – Global warming/ Climate change

- Tropical cyclones are largely confined to South China Sea, Bay of Bengal and Gulf of Mexico. Why?(2014)
- How does the Cryosphere affect climate change?
- Discuss the consequences of climate change on the food security in tropical countries.
- How does the melting of the Arctic ice and glaciers of the Antarctic differently affect the weather patterns and human activities on the Earth? Explain.

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Q.2 What are aurora australis and aurora borealis? How are these triggered? 15 marks (250 words)

Structure

- Introduction – Define Aurora
- Aurora Borealis and Aurora Australis
- The triggering of Aurora
 - Source of Charged Particles
 - Interaction with Earth's Magnetic Field
 - Collision with Atmospheric Gases
 - Emission of Light
- Conclusion

Note – may add - Factors Influencing Aurora Intensity

Introduction

- Auroras are bright and colourful lights, formed **due to an active interaction in space between charged solar winds and the Earth's magnetosphere**

Aurora Borealis and Aurora Australis

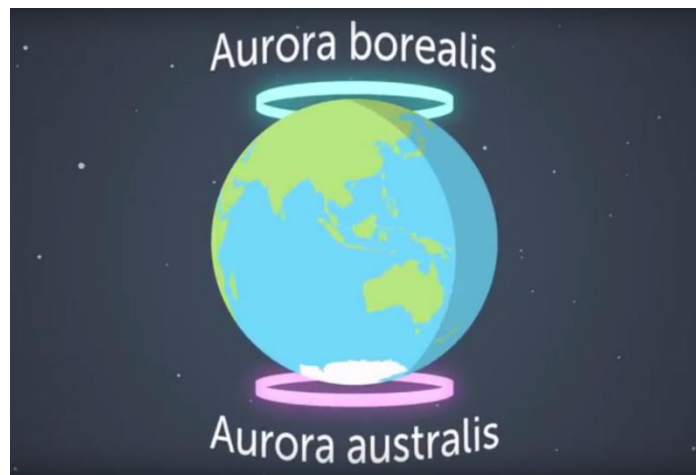
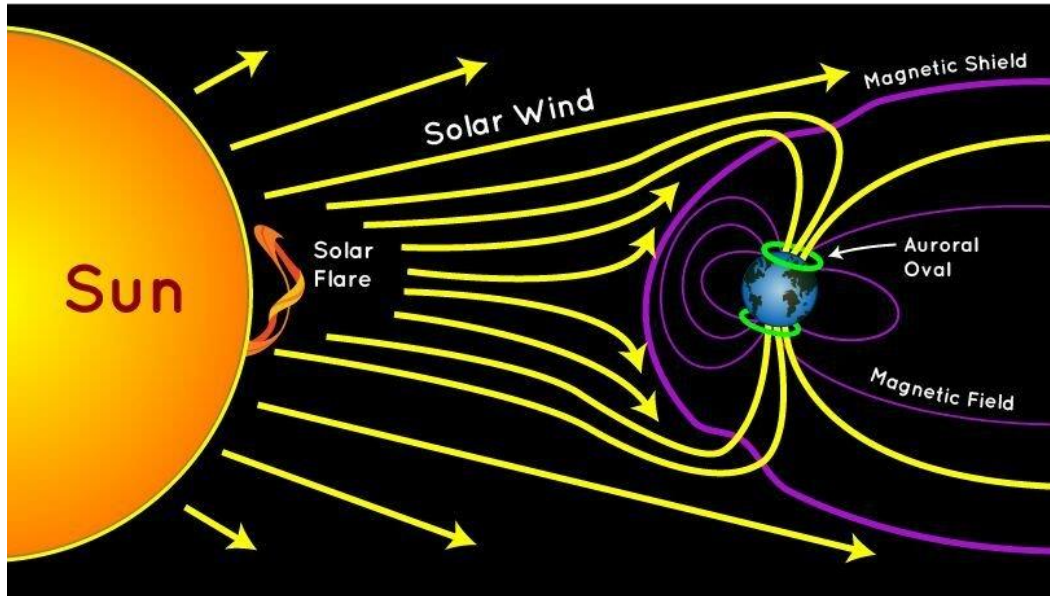
- The Aurora Borealis, or Northern Lights, occurs around the Arctic Circle, visible in countries like Norway and Canada.
- Conversely, the Aurora Australis, or Southern Lights, appears near the Antarctic Circle, observed from places like Antarctica.
- Note - Value Addition: Aurora lights in red hues were visible from Ladakh's pristine skies. Astronomers of the Indian Institute of Astrophysics, Bengaluru (IIA) captured the auroras through all-sky cameras positioned around the Indian Astronomical Observatory (IAO) in Hanle, Ladakh.

The Triggering of Aurora

- **Source of Charged Particles:** Auroras are triggered by charged particles emitted by the Sun, commonly known as the solar wind. This continuous stream mainly consists of electrons and protons that travel through space toward Earth.
- **Interaction with Earth's Magnetic Field:** When these solar wind particles approach Earth, they encounter the planet's magnetic field. This magnetic field acts as a shield, funneling the charged particles toward the polar regions in both hemispheres.
- **Collision with Atmospheric Gases:** At altitudes between approximately 80 and 300 kilometers, the energetic charged particles collide with gases such as oxygen and nitrogen in the upper atmosphere. These collisions excite the gas atoms, raising their energy levels.
- **Emission of Light:** As the excited atoms return to their normal energy state, they release photons – visible light – which create the shimmering colors of the aurora that we observe

Conclusion

- Aurora Borealis and Aurora Australis are awe-inspiring natural phenomena resulting from the dynamic interaction between solar emissions and Earth's magnetic environment. Their study provides valuable insights into space weather and geomagnetic processes, with implications for satellite communications and navigation systems.



Value addition

- Solar Maximum: Increased solar activity during the 11-year solar cycle leads to more frequent and brighter auroras.
- Solar Flares & CMEs(Coronal Mass Ejection): Large solar eruptions release bursts of charged particles that intensify auroral displays.
- Geomagnetic Storms: Disturbances in Earth's magnetic field increase charged particle flow into the atmosphere, enhancing auroral displays.

Theme – Solar System- Application based question

- How does the Juno Mission of NASA help to understand the origin and evolution of earth? (2017)
- Why is Indian Regional Navigational Satellite System (IRNSS) needed? How does it help in navigation? (2018)

Q. 3 What is the phenomenon of 'cloudbursts? Explain. 10 marks (150 words)

Structure

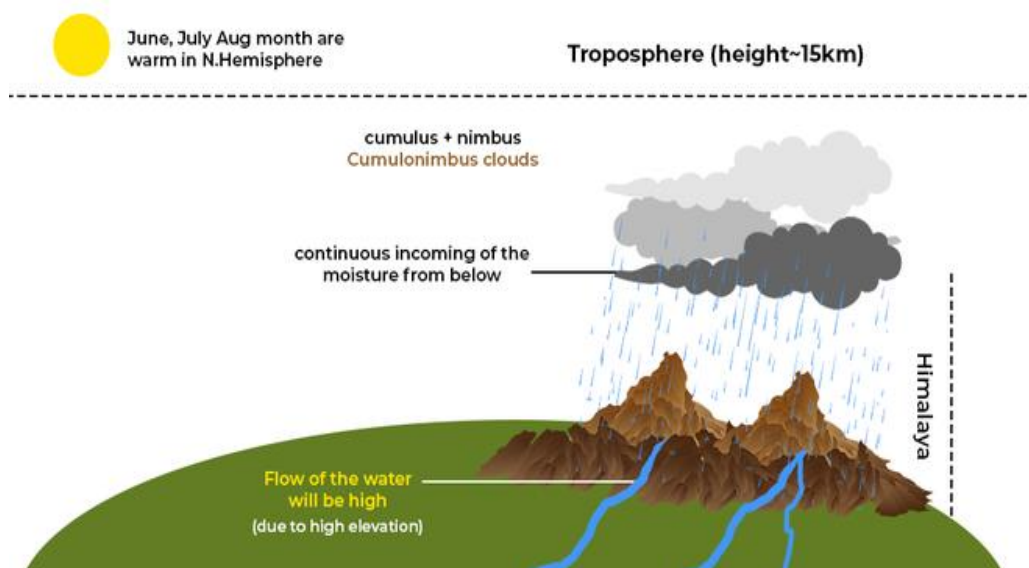
- Introduction – What are cloudbursts
- Mechanism of Cloudbursts
- Effects
- Consequences
- Challenges
- Conclusion

What are Cloudbursts?

- A cloudburst is sudden spell of localised, heavy rainfall.
- The India Meteorological Department defines cloudburst as the condition where the amount of rainfall over a particular area exceeds 100 millimetres in an hour.

Mechanism

- A cloudburst occurs when warm, moist air rapidly rises, cooling and condensing to form dense clouds.
- This process often happens in mountainous regions or during thunderstorms. Most of these happen in the Himalayan states where the local topology, wind systems, and temperature gradients facilitate the occurrence of such events.
- As the moist air rises, it cools. When the temperature drops to the dew point, the water vapor condenses into tiny water droplets, forming clouds.
- In certain conditions, particularly when air is forced upwards rapidly (like along a mountain slope), this process can happen very quickly.
- Once the clouds accumulate enough moisture, heavy rain falls suddenly, often at rates exceeding several inches in minutes.



Value Addition

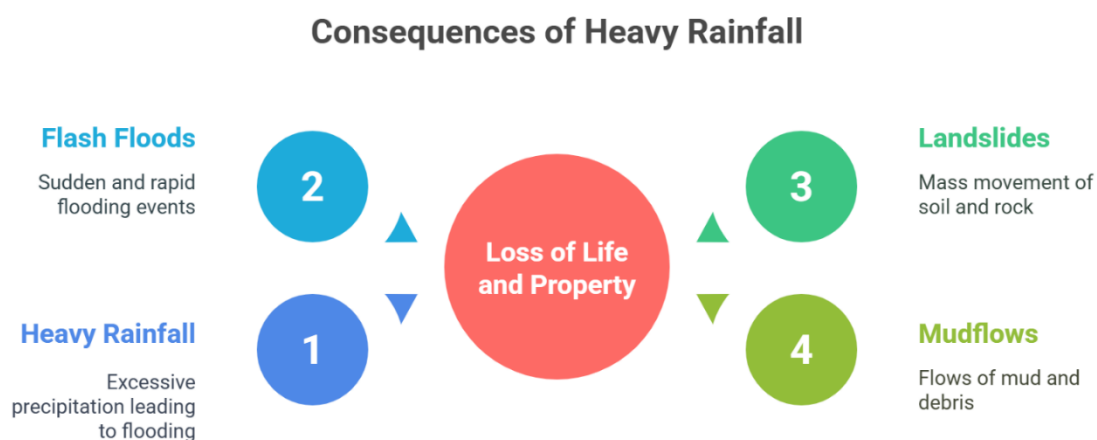
- **Orographic Lift:** This is a phenomenon where warm air currents force moisture-laden clouds upwards along the slopes of hills or mountains. As these clouds are already saturated, the upward push intensifies their development. Cloudbursts are more frequent in mountainous regions due to this orographic effect.
- **Growth of Droplets:** As the clouds ascend to higher altitudes, the water droplets within them grow larger, and additional droplets form, increasing the moisture content.
- **Intense Rainfall:** Eventually, these heavily loaded clouds can no longer contain the accumulated moisture and release it suddenly, causing intense, localized rainfall directly below.
- **Localized Thunderstorms:** In addition, cloudbursts can be triggered by localized thunderstorms, which form due to intense surface heating. These storms can result in sudden, heavy downpours over a small area.

Consequences

- Heavy Rainfall
- Flash Floods
- Landslides
- Mudflows
- Loss of life and property

Examples –

- **Kedarnath (2013):** A cloudburst contributed to catastrophic floods and landslides, killing thousands in Uttarakhand.
- **Chamoli (2025)** . In April 2025, a cloudburst in Chamoli, Uttarakhand triggered flash floods and landslides, blocking roads and burying vehicles under debris.



Challenges:

- Rapid Onset
- Localized Nature
- Lack of EWS
- Data Scarcity
- Topographical constraints
- **Way Forward :** EWS+ Improved forecasting - Doppler Radars+ Awareness & Education+ disaster preparedness + Sustainable development
- **Conclusion:** With increasing instances, it is crucial to integrate cloudburst risk into regional planning, enhance early warning systems, and promote sustainable land-use practices in vulnerable zones.

Theme – Cloudbursts

- Explain the mechanism and occurrence of cloudburst in the context of the Indian subcontinent. Discuss two recent examples. [2022]
- With reference to National Disaster Management Authority (NDMA) guidelines, discuss the measures to be adopted to mitigate the impact of the recent incidents of cloudbursts in many places of Uttarakhand. [2016]

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Q. 4 What is a twister? Why are the majority of twisters observed in areas around the Gulf of Mexico? 15 (250 words)

Introduction -

- A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. A "twister" is a colloquial term for a tornado, which is a rapidly rotating column of air that extends from a thunderstorm to the ground.
- **Mechanism:** Warm, moist air from the Gulf of Mexico rises, creating an unstable atmosphere. As this air ascends, it cools, leading to cloud formation. This rising warm air often meets cold, dry air from the north or west. The contrast between these air masses can lead to strong atmospheric instability. Changes in wind speed and direction at different altitudes (known as wind shear) can create a horizontal spinning effect in the atmosphere. When the updraft of the storm tilts this rotating air vertically, it can develop into a supercell. This combination of warm, moist air, cold air, wind shear, and the dynamics of supercells creates the ideal conditions for tornado formation.
- **Examples** - The United States receives more than 1,200 tornadoes annually – four times the amount seen in Europe

Reasons behind twisters being more common in Gulf of Mexico:

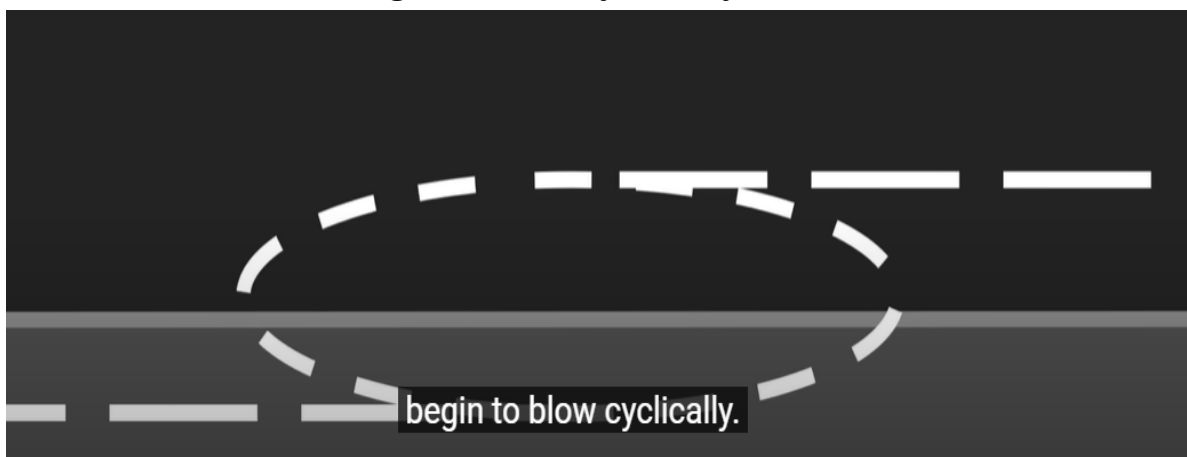
- **Warm, Moist Air from the Gulf of Mexico:** fuels the development of strong thunderstorms essential for tornado formation.
- **Collision with Cold, Dry Air from the North:** Cold, dry air masses from Canada and the Rocky Mountains frequently move southward, creating a sharp temperature contrast with the warm, moist air from the Gulf. This contrast leads to atmospheric instability conducive to severe storms and tornadoes.
- **Jet Stream and Wind Shear:** The jet stream often dips southward over this region, enhancing wind shear – changes in wind which is crucial for the development of rotating thunderstorms that can spawn tornadoes.
- **Flat Terrain Facilitating Air Mass Interactions:** The flat landscapes of these Plains and surrounding areas allow unimpeded interaction between contrasting air masses, facilitating the formation and movement of tornadoes.
- **Seasonal Weather Patterns:** During spring and early summer, the temperature differences between cold northern air and warm Gulf air are most pronounced, leading to increased thunderstorm and tornado activity.
- **Proximity to Tornado Alley and Dixie Alley:** The Gulf region lies adjacent to areas known as Tornado Alley and Dixie Alley, which are historically prone to tornadoes due to favorable atmospheric conditions, including high precipitation supercells and nighttime tornado activity

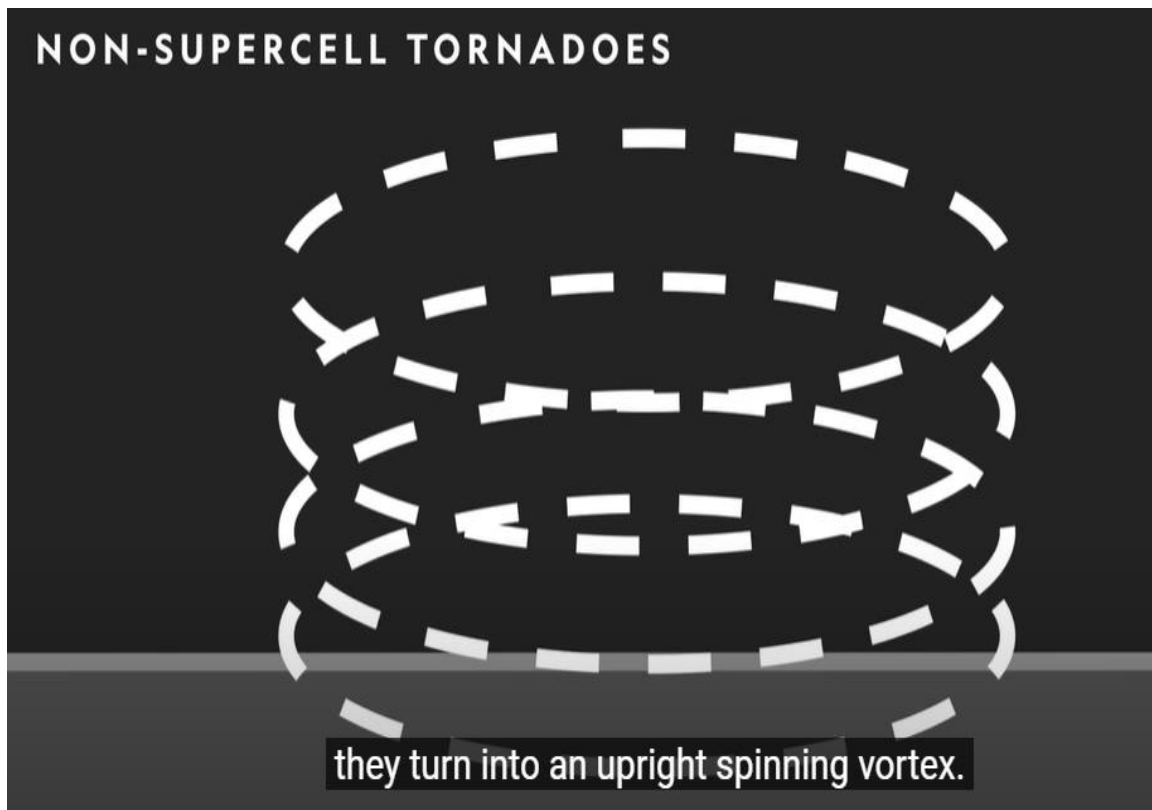
- **Conclusion** : Climate change, by increasing atmospheric moisture and instability, may lead to more frequent and intense twisters, especially around the Gulf of Mexico, making tornado-prone areas more vulnerable in the future.

Spinning column of air stretch from ground to clouds - Weak (Non supercell tornadoes) + Violent (Supercell tornadoes)

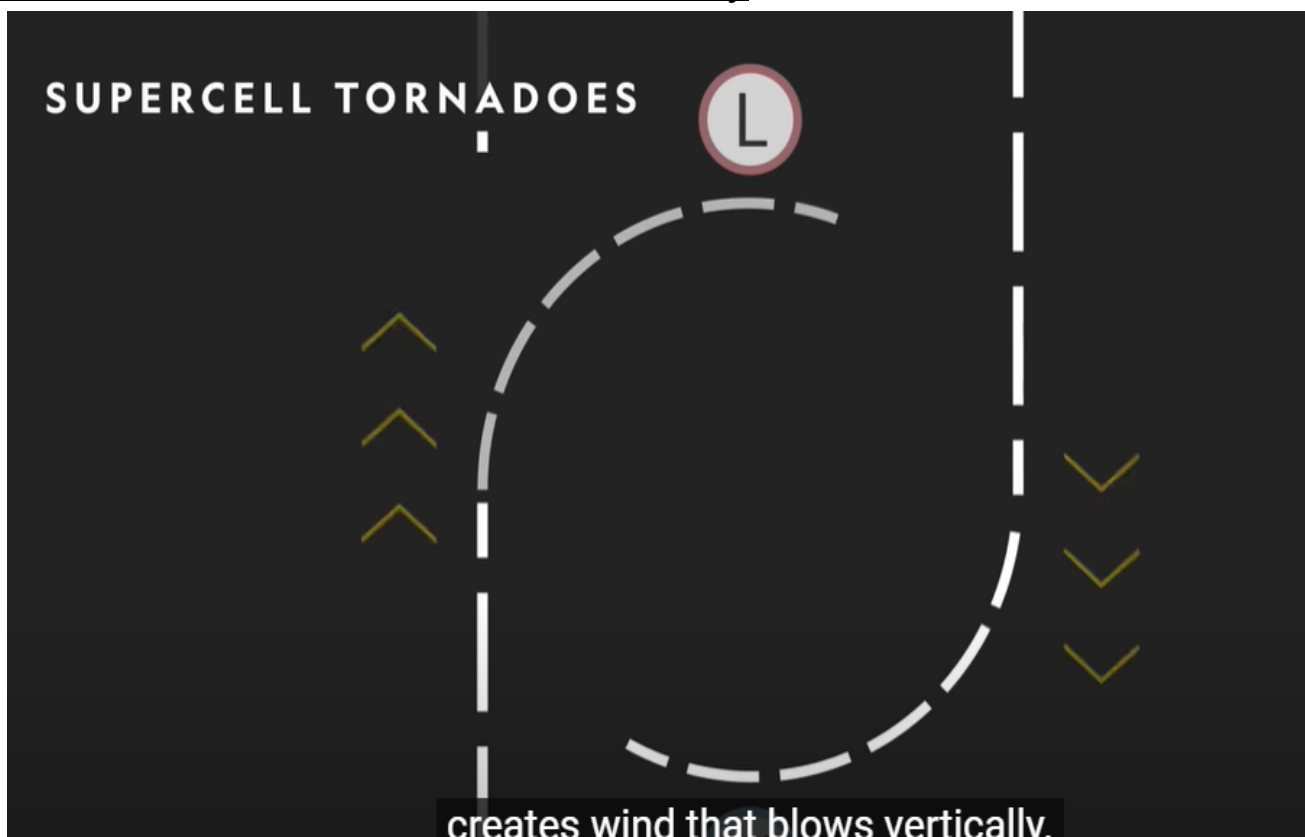


Hp and LP near ground level + Winds begin to pick up + winds blowing at diff speed and altitude winds begin to flow cyclically

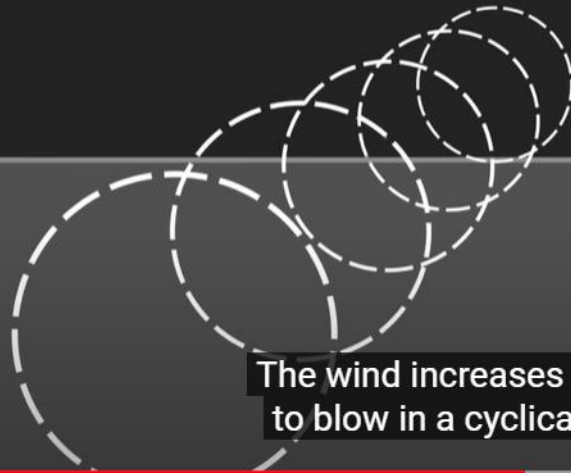




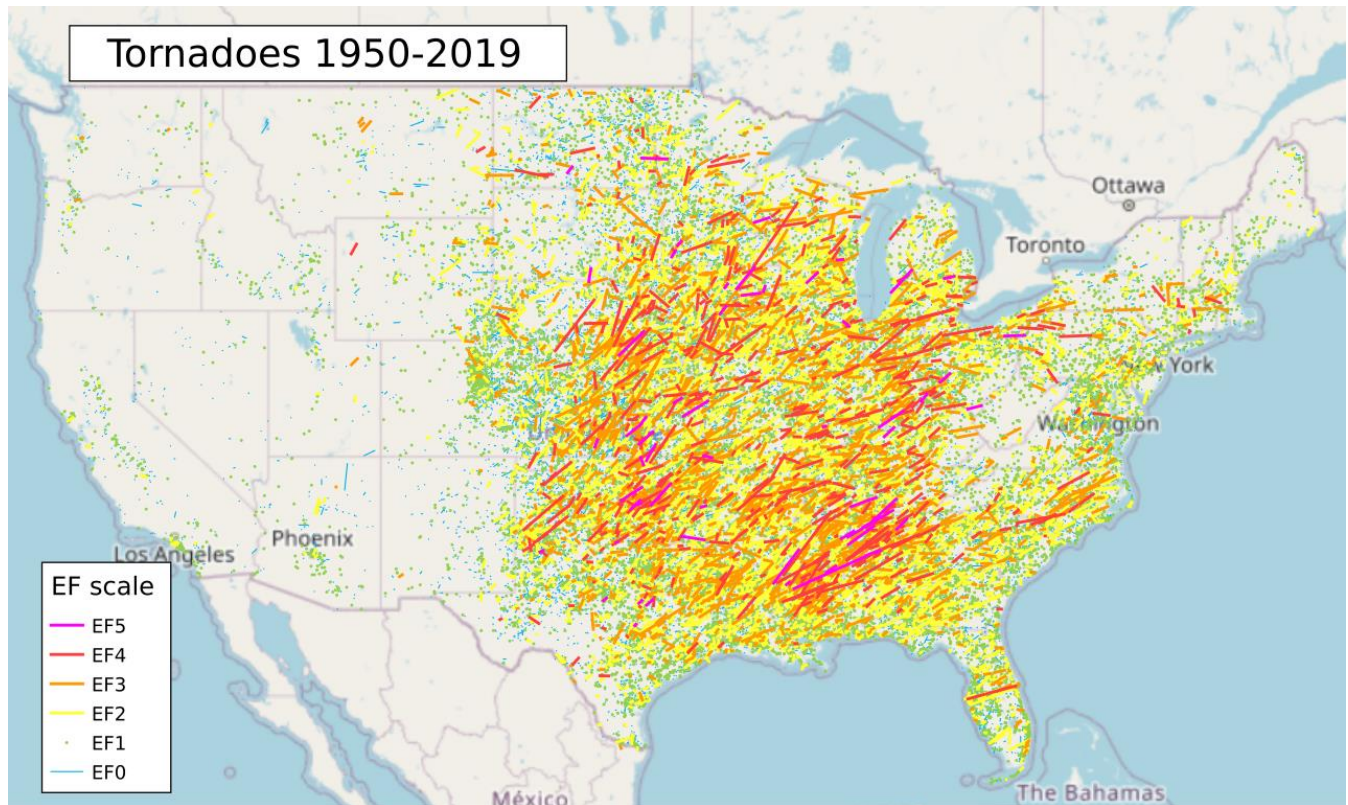
Violent superstorms- . Air particles attempting to bring two levels of air pressure into balance creates wind that flows vertically



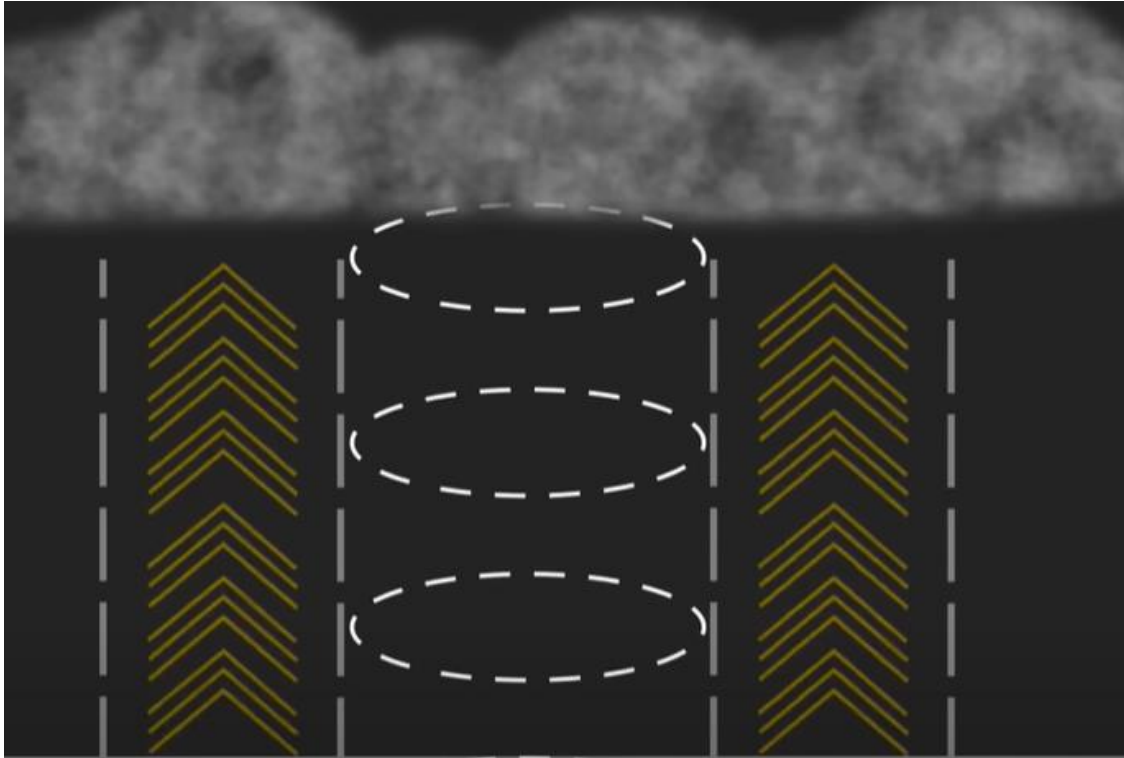
SUPERCCELL TORNADOES



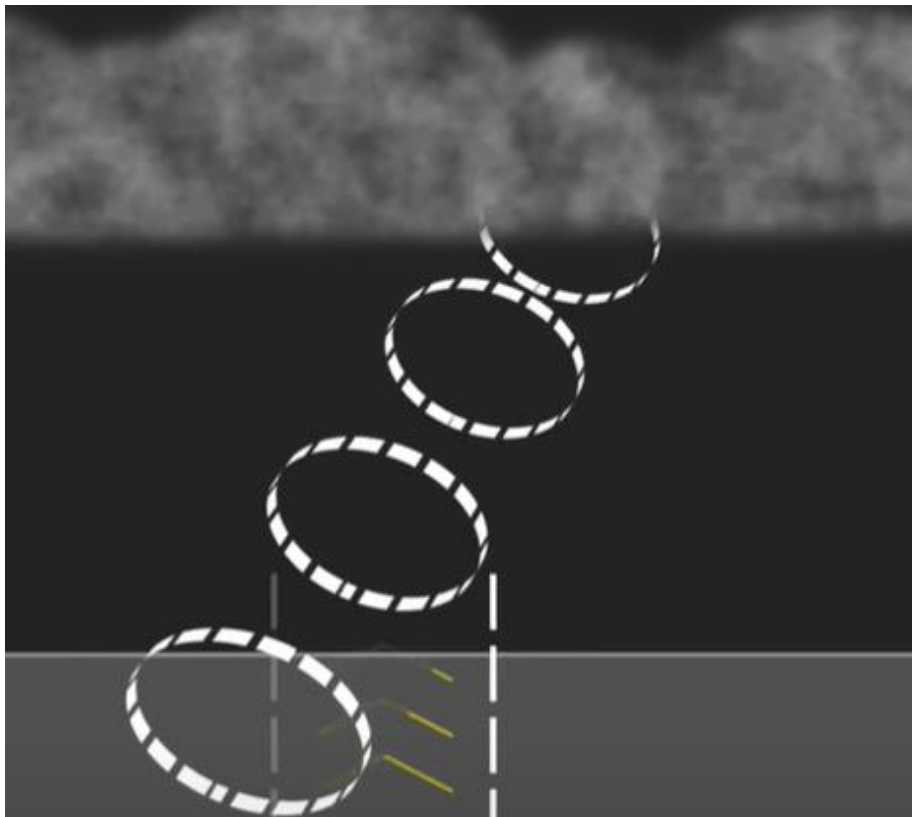
The wind increases and starts to blow in a cyclical fashion,



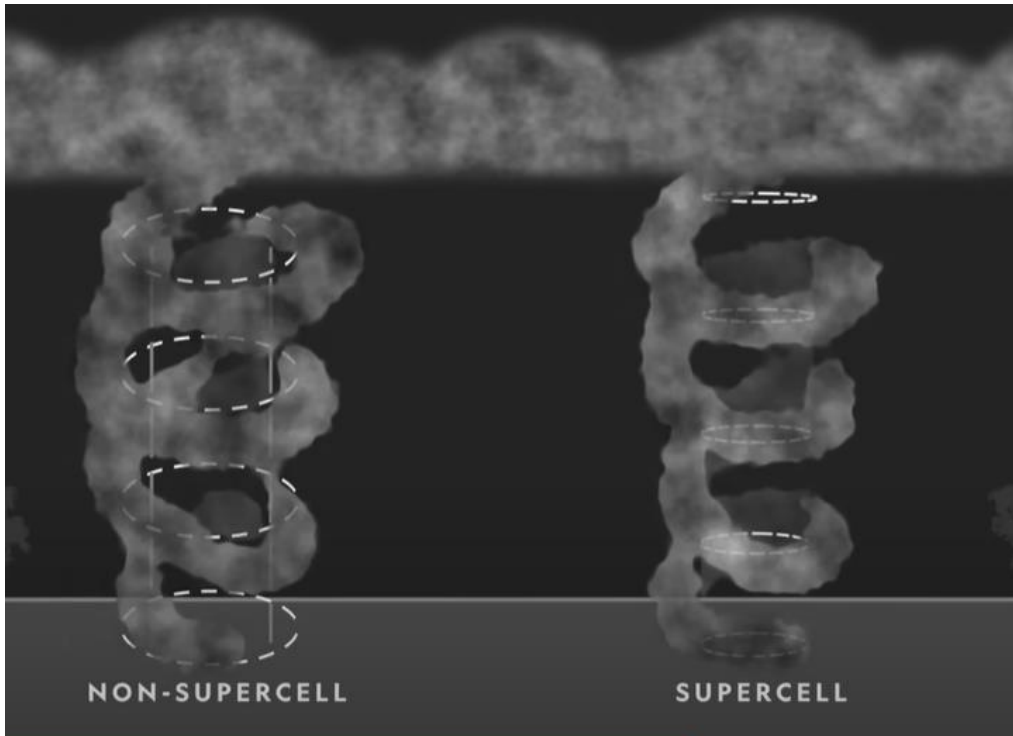
Updrafts stretches its vertical vortex until it reaches the clouds



Updraft lifts rolling pipe upwards



Start pulling condensation from clouds - Funnel shaped cloud



Spinning column of air stretch from ground to clouds - Weak (Non supercell tornadoes) + Violent (Supercell tornadoes)



Q. 5 Why do large cities tend to attract more migrants than smaller towns? Discuss in the light of conditions in developing countries.

Structure

- Introduction
- Reasons behind Large cities attracting more migrants in developing countries
- Challenges
- Conclusion

Reasons behind Large cities attracting more migrants in developing countries

- **Diverse Economic opportunities** : Job availability + Higher wages
- **Public service and infrastructure** - Education + Healthcare + Transportation + Connectivity
- Social Safety Nets and Welfare Mechanisms- Inclusion in Social Sector schemes
- **Political and Institutional support**- Urban focussed development policies + Foreign Investment
- Opportunity for Social and Economic mobility – Access to large social networks
- **Evolving Cultural Preferences and Lifestyle Aspirations** – Social acceptance + Association with diverse communities

Value Addition

- Bengaluru Known for its IT sector and startups attracting tech professionals from all over India.
- The South East Asia region attracts more migrants for employment , showing that job opportunities here remain a great attraction.
- Sao Paulo is a city that attracts migrants from all over Brazil and from other countries in search of better economic opportunities, cosmopolitan environment and entertainment options that smaller towns lack .
- Mumbai is known as the “City of Dreams” informally for rural migrants due to the presence of Bollywood, financial institutions, and a large informal economy.

Challenges :

- Housing Shortages
- Strain on Infrastructure and Public Services
- Growth of Informal Settlements
- Unemployment and Informal Sector Expansion
- Rising Urban inequality
- Environmental Degradation
- Social Tensions and Identity Conflicts
- Lack of Urban Planning and Governance Capacity

Note - People living in informal settlements in Bangladesh face a multitude of challenges. The capital city of Dhaka alone has some 5,000 slums, which are characterised by overcrowding and limited access to basic services like clean water, sanitation and electricity.

Conclusion:

- While large cities attract migrants with better opportunities, unplanned growth causes severe challenges. Balanced regional development, rural investment, and sustainable urban planning are essential for equitable progress in developing countries.

Theme – Migration

Discuss the changes in the trends of labour migration within and outside India in the last four decades. (2015)

Value Addition

- Does urbanization lead to more segregation and/or marginalization of the poor in Indian metropolises?(2023)
- With a brief background of quality of urban life in India, introduce the objectives and strategy of the 'Smart City Programme'. (2016)
- Discussion the various social problems which originated out of the speedy process of urbanization in India. (2013)

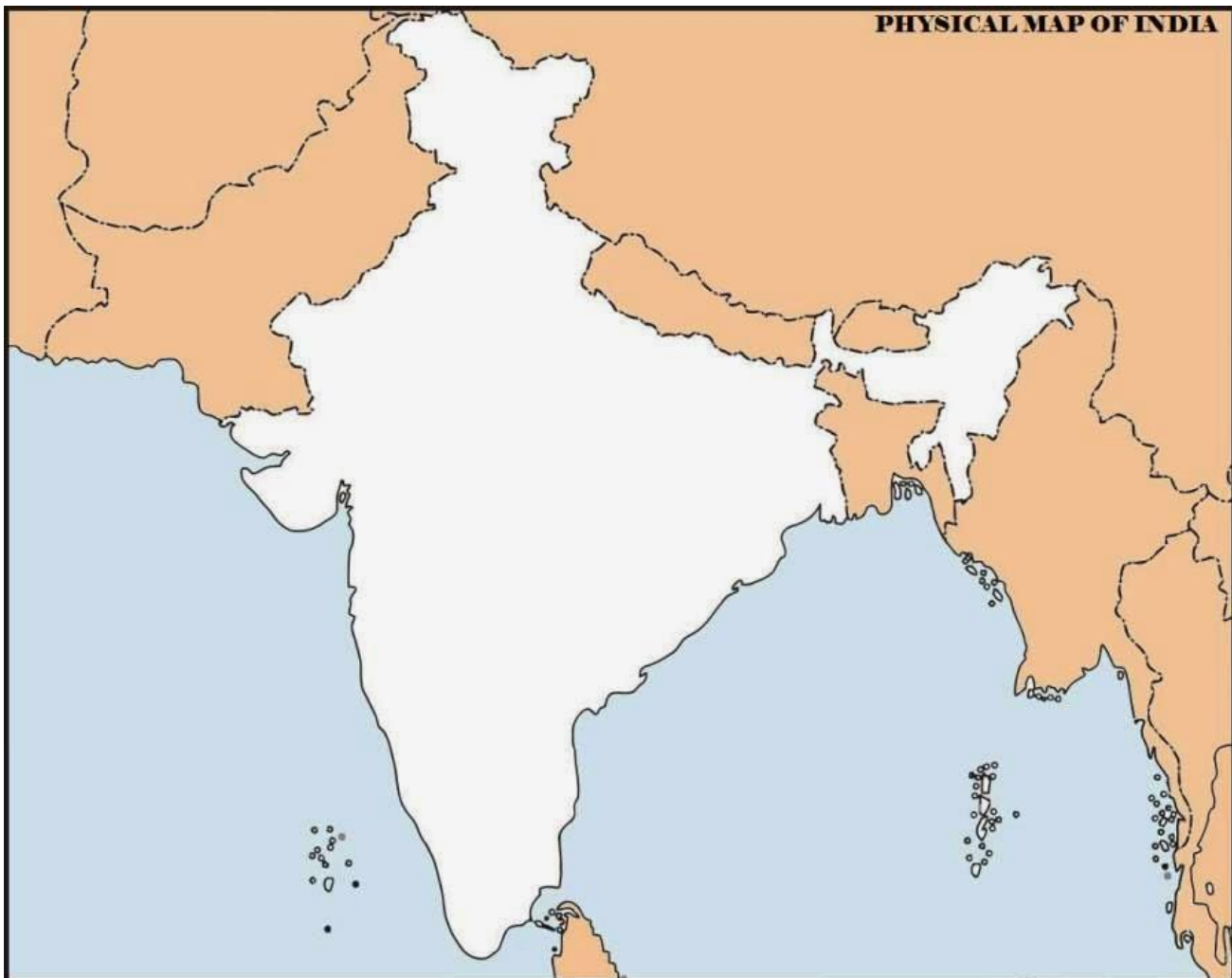
Q. 6 The groundwater potential of the Gangetic Valley is on a serious decline. How may it affect the food security of India? 15 words (250 words)

Structure

- Introduction
- Causes of serious decline
- Impact on food security of India
- Conclusion

Introduction

- The Gangetic valley, spanning states like Uttar Pradesh, Bihar, and West Bengal, is among India's most fertile and agriculturally productive regions. However, reports such as the Central Ground Water Board (CGWB) Assessment Report and NASA GRACE satellite data have raised alarms about the steep decline in groundwater levels across this region. Groundwater storage levels have been declining by 2.6 centimetres per year in the Ganga basin, according to new estimates published in Nature Magazine.



Causes of Serious Decline :

- **Overextraction for Irrigation**
 - Water-intensive crops such as paddy and sugarcane dominate the Gangetic plains, leading to unsustainable withdrawal of groundwater. **For example**, In western UP, groundwater extraction exceeds recharge by **over 100%**, as per CGWB, primarily due to rice-wheat mono-cropping and tube well dependency.
- **Inefficient Irrigation Practices**
 - Traditional flood irrigation, which leads to more than **50% water wastage**, is still widely used due to lack of awareness and affordability of micro-irrigation systems. **For Example**, less than 7% of net sown area in Bihar is under drip or sprinkler irrigation, as per the Agriculture Census 2021.
- **Erratic Monsoon and Climate Change**
 - Altered rainfall patterns have led to reduced percolation and recharge of aquifers. For example: The Indian Institute of Tropical Meteorology (2021) found that the **Gangetic plain has experienced a 10-20% reduction in monsoon rainfall over the past two decades, affecting natural recharge cycles.**
- **Urbanisation and Loss of Recharge Zones**
 - Sealing of soil surfaces due to urban expansion has decreased the infiltration capacity of land. **For example:** Urban growth in cities like Kanpur and Patna has led to a **30-40% reduction in groundwater recharge**, according to a TERI study (2022).

Government measures to tackle serious issue :



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Impact on Food Security of India

- **Reduced Crop Yields**
 - Lower water availability limits irrigation, leading to poor harvests.
 - *Example:* Eastern UP saw a **12-15% dip in rice yield** in 2022 due to water stress.
- **Increased Monsoon Dependency**
 - Without reliable groundwater, crops are more vulnerable to droughts.
 - *Example:* In 2015 drought led to a **10% drop in cereal output in Bihar** due to inadequate aquifer storage.
- **Higher Input Costs for Farmers**

- Falling water tables require deeper borewells and more pumping energy.
- *Example:* In UP, the cost of borewell drilling has **doubled in the past 10 years**, burdening small farmers.
- **Threat to National Food Security Buffer**
 - States like UP and Bihar are key contributors to national grain procurement.
 - *Example:* UP alone contributes ~15% of wheat and ~13% of rice to the FCI central pool. Groundwater shortages threaten this supply chain.
- **Dairy Products** : Since fodder crops too depend on groundwater availability.
 - Uttar Pradesh has been amongst highest milk producing states.
 - Note - **Data** - An analysis focusing on district-level data in Uttar Pradesh establishes a **direct correlation between groundwater scarcity and food grain production. The findings indicate that a 1-meter decline in groundwater from its long-term mean results in an approximately 8 percent reduction in food grain production**

Conclusion

- Going forward, India must strengthen enforcement of groundwater regulations, promote water-efficient crops, invest in agro-ecological planning, and empower communities for participatory water governance. Securing groundwater in the Gangetic valley is not merely an environmental imperative – it is fundamental to ensuring long-term food security for all the citizens.

Theme – Ground Water

“The ideal solution of depleting ground water resources in India is water harvesting system.” How can it be made effective in urban areas?

Value Addition:

- What is water stress? How and why does it differ regionally in India?
- India is well endowed with freshwater resources. Critically examine why it still suffers from water scarcity.
- In what way do micro-watershed development projects help in water conservation in drought-prone and semi-arid regions of India?
- The effective management of land and water resources will drastically reduce human miseries. Explain.