

Topics - MINDS MAPS included (Daily current affairs 22nd ,23rd and 24th November 2024



- About International criminal court
- Rock-cut footprints, human figure dating back to Megalithic period unearthed at Kerala's Kanhirapoiil.
- Tungsten Mines
- Bilateral Investment Treaty: India-UAE
- Commission for Air Quality Management (CAQM)
- About COP29 AND Climate finance
- Minke Whales' Hearing Sensitivity: New Insights
- Ecological Restoration in Oil Palm Plantations
- environmental variables and body size in paper wasps.
- Land subsidence and groundwater
- Ant Foraging Behavior and Trail Formation
- MAINS



By saurabh Pandey



THE HINDU

Target Mains -2025/26 -

Q International institutions may not control foreign affairs. Elucidate

**Connect with sir
9057921649**

**send your answer - Saurabh pandey
upsc telegram channel**

आकलन **(AAKLAN) PLUS FOR UPSC**

2025/26

**IAS MAINS ANSWER WRITING
PROGRAM + Test series**

- **3 months - validity - 35 Answer evaluation. + 2 full length Test + 1 essay**
- **6 month validity - 70 Answers evaluation + 2 full length Tests + 2 Essay**
- **1 year validity - 200 + Answers evolution + five 1 to 1 session with sir + 10 full length tests + 5 essays**

Both English and Hindi



We're fine-tuning our website in beta mode for the best experience. We're working tirelessly to ensure it's top-notch... Also please join us on [Telegram](#)



Categories ▾

🔍 Search for anything...

Login

Visit - saurabhpandeyupsc.com

Home Courses ▾ Pages ▾ More ▾ About UPSC Exam ▾ Current-Affairs Pointers ▾

YouTube Channel

All Courses

⚡ Impo All Courses Current Affairs 22nd & 23rd SEPTEMBER 2024 Current Affairs 21st SEPTEMBER 2024 Curren

Popular Courses

Connect with sir
9057921649 (ONLY MSG)

See More →

Mains Module and Integrity
FOR UPSC 2025/26
GS PAPER 4
250 Marks
Also include ARC report on ethics in Governance
By saurabh pandey sir
Notes with Maps
LIVE

Best Course On Ethics And Integrity For UPSC...

Admin

Mains Module Writing
ESSAY
Connect with sir 90579 21649
Starting 9th September 2024
• Total 50 ESSAY
• Model essay
• VIDEO lectures
• Evaluation of Essay
TARGET 140+
BY SAURABH PANDEY SIR

Master The Art Of Essay Writing With This...

Admin

GS PAPER 1
Mains Module
Mains special
Connect with sir 90579 21649
starting 10th Sep 2024
Complete course on Society, globalisation, Regionalism, communalism (FOR UPSC 2025/26)
BY SAURABH PANDEY SIR

Course On Society , Globalisation...

Admin

GS PAPER 3
Mains Module
Mains special
Connect with sir 90579 21649
starting 10th Sep 2024
Complete course on Cybersecurity, Disaster Management and Border management (FOR UPSC 2025/26)
BY SAURABH PANDEY SIR

Complete Course On Cyber Security ,Disaste...

Admin



ICC issues arrest warrants against Netanyahu, Gallant, and Hamas leaders



Serious charges: Benjamin Netanyahu and Yoav Gallant during a press meet in the Kirya military base in Tel Aviv in 2023. REUTERS

Associated Press THE HAGUE

The International Criminal Court issued arrest warrants on Thursday for Israeli Prime Minister Benjamin Netanyahu, his former Defence Minister Yoav Gallant and Hamas officials, accusing them of war crimes and crimes against humanity over their 13-month war in Gaza and the October 7, 2023 attack on Israel, respectively.

Mr. Netanyahu condemned the arrest warrant against him, saying Israel “rejects with disgust the absurd and false actions”. In a statement released by his office, he said: “There is nothing more just than the war that Israel has been waging in Gaza.”

The decision turns Mr. Netanyahu and the others into internationally wanted suspects and is likely to further isolate them and complicate efforts to negotiate a cease-fire to end the fighting. But its practical implications could be limited since Israel and its major ally, the U.S., are not members of the court and two of the Hamas officials were killed in the conflict.

Mr. Netanyahu and other Israeli leaders have condemned ICC Chief Prosecutor Karim Khan’s request for warrants as “disgraceful” and “anti-Semitic”. U.S. President Joe Biden blasted the prosecutor and expressed support for Israel’s right to defend itself against Hamas.

The three-judge panel issued a unanimous decision to issue warrants for Mr. Netanyahu and Mr. Gallant. “The Chamber considered that there are reasonable grounds to believe that both individuals intentionally and knowingly deprived the civilian population in Gaza of objects indispensable to their survival, including food, water, and medicine and medical supplies,” the decision said.

The court also issued a warrant for Mohammed Deif, one of the leaders of Hamas, over the October 2023 attacks that triggered Israel’s offensive in Gaza. The ICC chief prosecutor withdrew his request for warrants for two other senior Hamas figures, Yahya Sinwar and Ismail Haniyeh, after they were both killed in the conflict.

Topic → About International criminal court


The International Criminal Court (ICC) is an independent international tribunal established to prosecute individuals for crimes such as genocide, war crimes, and crimes against humanity.


The ICC was established by the Rome Statute, which was adopted on July 17, 1998, and entered into force on July 1, 2002.

The court is located in The Hague, Netherlands, and operates under the principle of complementarity, meaning it only intervenes when national courts are unable or unwilling to prosecute.

The ICC can prosecute individuals, not states, and its jurisdiction is limited to crimes committed after the Rome Statute came into effect.

The court aims to promote accountability and justice for victims of serious international crimes, contributing to global peace and security.


 The ICC has 123 member states as of now, but some major countries, including the United States, have not ratified the Rome Statute.


 The ICC faces challenges such as political interference, limited resources, and criticisms regarding its effectiveness and perceived bias.


Summary: The International Criminal Court is a key institution for prosecuting serious international crimes, established by the Rome Statute in 2002, with a focus on accountability and justice.





Topic → Rock-cut footprints, human figure dating back to Megalithic period unearthed at Kerala's Kanhirapoil


 Discovery of Footprints: 24 pairs of prehistoric footprints and a human figure have been found carved into rock in Kanhirapoil, Kerala.


 Megalithic Period: The carvings are believed to date back to the Megalithic period, offering insights into ancient culture.

 Footprint Sizes: The footprints range from six to 10 inches, indicating representations of both children and adults.

 Cultural Significance: The carvings are thought to honor the souls of the deceased, with all footprints pointing west; locals associate them with a goddess.

 Expert Confirmation: Archaeologist Professor Ajith Kumar and history Professor Nandakumar Koroth confirmed the significance of the find during a site visit.

 Regional Connections: The discovery shares similarities with prehistoric rock art in Karnataka and aligns with earlier findings in north Kerala.

 Historical Insight: The 2,000-year-old rock art reflects the lives and artistic expressions of early inhabitants of the region, emphasizing its cultural heritage.

Summary: A significant archaeological find in Kerala reveals prehistoric footprints and carvings, believed to date back to the Megalithic period, highlighting the region's ancient cultural heritage

Centre has cleared tungsten mining in T.N. village: Minister

The Hindu Bureau

CHENNAI

Forest Minister K. Ponmudy on Thursday reiterated that the Tamil Nadu government had not granted permission for tungsten mining (by a Vedanta subsidiary) near Arittapatti, a Biodiversity Heritage Site in Madurai.

Only the Union government had granted permission for establishing a mining company, he said.

“When permission is sought from the Forest Department [of Tamil Nadu], we will flag all the issues and insist that it be rejected,” the Minister told journalists.

To a query whether it could be understood that the Tamil Nadu government would reject the application seeking permission, Mr. Ponmudy maintained that the State government had not given



K. Ponmudy

To persistent queries, the Forest Minister said, “The application has not been submitted yet. Once it is, if it is found that the project would have an adverse impact, it would be rejected.”

Mr. Ponmudy recalled that it was under the DMK government that the site at Arittapatti was declared a Biodiversity Heritage Site, “only because Tamil Nadu Chief Minister wants to ensure that it remains a forest

Topic - Tungsten Mines

- **Tungsten Mines Locations:** India has tungsten mines in Rajasthan, West Bengal, Maharashtra, and Karnataka.
- **Degana Tungsten Project:** Discovered in 1912, it features four types of tungsten deposits and has been operated by various agencies, with Hindustan Zinc Limited taking over in 1991.
- **Chendapathar Mine Closure:** The tungsten mine in West Bengal was closed due to economic non-viability despite producing small amounts of concentrate.
- **Other Notable Deposits:** Tungsten deposits are also found in Balda (Rajasthan), Khobna-Kuhi-Agargaon (Maharashtra), Burugubanda-Tapaskonda, and Madurai.
- **Scheelite-bearing Gold Ores:** Kolar and Hutti areas contain scheelite-bearing gold ores alongside tungsten deposits.

Tungsten Applications: Tungsten is utilized in various products, including special alloys, filament wire, mobile phones, drilling machinery, and electrical appliances.

Resource Estimation: The Geological Survey of India (GSI) has estimated tungsten resources in the Sakoli basin of Bhandara and Nagpur districts.

Summary: India has several tungsten mines across various states, with significant historical and economic implications, particularly in Rajasthan.

A bilateral investment treaty with a 'bit' of change



The bilateral investment treaty (BIT) between India and the United Arab Emirates (UAE) which was signed earlier this year was recently made public. This BIT, which will replace the 2014 India-UAE investment treaty, is critical. It reveals India's latest investment treaty practice and might elucidate India's ongoing negotiations with the United Kingdom and the European Union. A typical BIT should accomplish two objectives. First, it should balance the competing goals of investment protection and the state's sovereign right to regulate. Second, it should contain unambiguous provisions to reduce the discretion of investor-state dispute settlement (ISDS) tribunals.

Departures from the Model

Though India adopted a Model BIT in 2015, it has barely managed to sign a handful of BITs based on this model. Intriguingly, the India-UAE BIT departs from the Model BIT on some significant issues.

First, it provides that a foreign investor must exhaust local remedies for at least three years before bringing an ISDS claim. This period in the Model BIT and subsequent BITs that India signed with countries such as Belarus and Kyrgyzstan is five years. Several countries lament that five years is too long. Given the overstretched Indian judicial system, it is unlikely that a foreign investor's legal dispute with the state would be resolved in five years. It seems India has taken these concerns on board and softened its stand. This gives foreign investors quicker access to ISDS, thus, bringing the pendulum somewhat back to the pole of investment protection. A shorter waiting period to invoke ISDS does not mean that India is exposing itself to treaty claims, as asserted by some. The function of investment treaties is to safeguard foreign investment from sovereign regulatory abuse. As long as India does



Prabhash Ranjan

a Professor and Director, Centre for International Investment and Trade Laws, Jindal Global Law School

Despite some departures, the India-UAE bilateral investment treaty establishes a continuity of India's investment treaty practice

not indulge in regulatory abuse it need not worry about ISDS claims.

Second, the definition of investment in the India-UAE BIT states that for an enterprise to qualify as an investment, and thus be eligible for treaty protection, it should possess key economic characteristics such as a commitment of capital, profit expectation, and risk assumption. The criterion that the investment should, in addition, be significant for the development of the host state, which is present in the Model BIT, has been done away with. This is a welcome development clarifying the jurisdictional question. Several ISDS tribunals have held that proving foreign investment is significant for the development of the host state, is an inherently value-laden exercise. Thus, by removing this subjective element from the definition of investment, India and the UAE have reduced arbitral discretion. At any rate, when a lawfully created enterprise satisfies other key economic investment characteristics, it is presumably significant for the host state's development.

Greater clarity

Third, Article 4 of the India-UAE BIT, which talks of 'treatment of investments', specifically lists when state action will amount to a treaty violation such as when there is a denial of justice or when there is a fundamental breach of due process in dealing with investment. These grounds are mentioned in a similar provision in the Model BIT. However, in the Model BIT, these grounds are linked to customary international law (CIL) whereas in Article 4 of the India-UAE BIT, there is no reference to CIL. The content of CIL concerning various aspects of foreign investment is not settled. Thus, a reference to CIL in the treaty, as numerous ISDS cases show, gives too much discretion to these tribunals. Consequently, Article 4 brings greater clarity for states and

investors and curbs arbitral discretion.

A continuity

Notwithstanding some departures, the India-UAE BIT establishes a continuity of India's investment treaty practice. For instance, the India-UAE BIT, like the Model, does not contain the most favoured nation (MFN) provision, which is a core non-discrimination standard in international economic relations. Likewise, state action on taxation is outside the scope of the India-UAE BIT. Thus, arguably, a foreign investor cannot challenge tax measures even if they are abusive. This maximises the state's regulatory power at the cost of investment protection. Like the Model BIT, Article 14.6(i) of the India-UAE BIT bars the jurisdiction of an ISDS tribunal to review the 'merits' of a domestic court decision. Arguably, 'merits' means that ISDS tribunals should not act as a court of appeal. However, 'merits' can also have an alternative interpretation.



Since the investor will bring an ISDS claim on the same issue adjudicated by the domestic court, the state can plausibly argue that the case is on the 'merits' of the domestic court decision. This might impede the tribunal's ability to hear the case. On some issues, the India-UAE BIT goes beyond the Model. For instance, it specifically disallows third-party funding and the unavailability of ISDS if an allegation of fraud or corruption is made against the investor.

One does not know whether the departures from the Model BIT signify India's change of heart or are specific to the UAE. Developed countries would be pleased with India's softening of the five-year domestic litigation requirement. However, they would remain concerned about India's continued stand of excluding MFN and taxation issues from the BIT's ambit.





Topic → Bilateral Investment Treaty: India-UAE



Overview


-  The bilateral investment treaty (BIT) between India and the UAE was signed earlier this year, replacing the 2014 treaty.
-  Reflects India's current investment treaty practices and may influence ongoing negotiations with the UK and EU.

Key Features

-  A typical BIT aims to balance investment protection with the state's right to regulate and limit ISDS tribunal discretion.
-  The India-UAE BIT allows foreign investors to access ISDS after exhausting local remedies for three years, shorter than the five years in the Model BIT.
-  The definition of investment requires key economic characteristics but removes the requirement for the investment to significantly benefit the host state.
-  Changes in the BIT are seen as a move towards enhancing investment protection while reducing arbitral discretion.


Objectives





 The treaty aims to safeguard foreign investments from regulatory abuse by the state, provided India maintains fair regulatory practices.


India-UAE BIT: Article 4 Overview


Key Points on Article 4


 Investment Treatment: Article 4 of the India-UAE BIT focuses on the treatment of investments, detailing specific actions that are considered treaty violations.


 Identified Violations: It highlights violations such as denial of justice and fundamental breaches of due process in investment dealings.

 Customary International Law (CIL): Unlike the Model BIT, Article 4 does not include references to CIL, which often lacks clear definitions regarding foreign investment.

 **Ambiguities in CIL:** The undefined nature of CIL in foreign investment can lead to ambiguities.


 **Reduced Arbitral Discretion:** By omitting CIL references, Article 4 limits arbitral discretion, offering clearer guidelines for both states and investors.


 **Predictable Legal Standards:** This clarity benefits both parties by establishing more predictable legal standards.


 **Enhanced Legal Certainty:** Overall, Article 4 enhances legal certainty in investment treaties between India and the UAE


India-UAE Bilateral Investment Treaty (BIT) Overview



 The India-UAE BIT maintains continuity with India's investment treaty practices, notably lacking a most favoured nation (MFN) provision.

 Taxation measures are excluded from the treaty's scope, limiting foreign investors' ability to challenge abusive tax actions.

 Article 14.6(i) restricts ISDS tribunals from reviewing the 'merits' of domestic court decisions, potentially hindering tribunal jurisdiction.

 The BIT explicitly prohibits third-party funding and denies ISDS access if fraud or corruption allegations arise against the investor.

🤔 Deviations from the Model BIT may reflect either a shift in India's approach or be specific to the UAE context.

🌍 Developed nations may welcome India's relaxation of the five-year domestic litigation requirement but remain wary of the exclusion of MFN and taxation issues.

↔ Overall, the India-UAE BIT represents a blend of traditional investment protections and new limitations that could impact foreign investment dynamics.

Key Aspects of the India-UAE BIT

- Continuity and Change: The treaty maintains traditional practices but introduces new limitations.
- Exclusion of MFN and Taxation: These exclusions could impact foreign investors' rights.
- ISDS Limitations: Restrictions on tribunal jurisdiction and third-party funding.
- Contextual Deviations: Possible shifts in India's approach or UAE-specific adjustments.

Global Reactions: Mixed responses from developed nations regarding litigation requirements and exclusions

Implications for Foreign Investment

- Investment Dynamics: The blend of protections and limitations could alter investment strategies.
- Legal Challenges: Potential increase in legal complexities for foreign investors.
- Policy Shifts: Reflects possible changes in India's investment policy framework.
- India-UAE Bilateral Investment Treaty Text
- Analysis of India's Investment Treaty Practices
- Global Investment Policy Reports

What's the Commission for Air Quality do to improve Delhi air?

Why did the Supreme Court pull up the
the Commission for Air Quality
Management?

Nikhil M. Bhat

The story so far:

A pollution in Delhi has been in the 'severe' and 'severe plus' category for the most part of the last 10 days. This week, the Supreme Court pulled up the Commission for Air Quality Management (CAQM), the government's monitoring agency, on its inadequate pollution control response.

What is the CAQM?

The CAQM is the National Capital Region (NCR) and adjoining areas came into existence through an ordinance in 2000, which was later replaced by an Act of Parliament in 2001. The CAQM was set up for better coordination, research, monitoring and resolution of problems surrounding air quality and connected issues. It initially had 15 members, comprising officials, past and present, of the environment ministry and other departments of the Union government, as well as officials of various State governments, and representatives from NGOs and other agencies. The CAQM is now headed by Rajesh Verma and there are 27 members.

The CAQM replaced the EPCA (Environmental Pollution (Prevention and Control) Authority), which was formed in 1986 by the Supreme Court. However, the EPCA was not backed by a statute and experts had raised the issue that it lacked the teeth to act against authorities which

Through the CAQM orders, despite that makes plans and under the EPCA that coordinates with under the EPCA that different agencies. It is in the agencies that have measures being followed by the CAQM itself, to implement them including the Graded Plan or GRAP, a list of temporary emergency measures to control air pollution.

What are the powers of CAQM?

Under the Commission for Air Quality Management in National Capital Region and Adjoining Areas Act, 2001, the CAQM has given the power to take all measures, issue directions and enforce compliance, as it deems necessary, for the purpose of protecting and improving the quality of air in the NCR and adjoining areas. Under Section 14 of the Act, the CAQM can initiate stringent actions against officers for not following its orders.

Why did the SC pull up the CAQM?

Over the years, the Supreme Court which has been hearing an ongoing case on air pollution, has pulled up different governments and agencies for their laxity. On September 27, Justice A.S. Oka and Justice Augustine George Masih orally observed about CAQM: "In pollution, your directions are in the air." The court was referring to various stakeholders not following the CAQM's orders despite specific provisions under the 2001 Act. "There has been total non-compliance of the Act. Please show us a single direction issued to any stakeholder under the Act... We are of the view that though the Commission has taken steps, it needs to be more active. The Commission must ensure that its efforts and directions issued actually translate into reducing the problem of pollution," the Bench observed. On November 18, the Supreme Court slammed the CAQM for delayed action while directing stringent curbs under Stage IV of the GRAP and noted that rather than taking preventive action to contain air pollution, it waited in vain for the air to improve. Stage IV is the highest level of restrictions under GRAP, and according to the CAQM's rules, it is supposed to be implemented when the air quality category is likely to fall to 'severe plus', and is likely to remain in that level for three or more days. The court pulled up the CAQM for delaying implementation of curbs though the AQ had slipped to the 'severe plus' category.

Is the CAQM to blame for Delhi's pollution?

Through the CAQM makes plans and coordinates with different agencies, it is the agencies that have to implement them on the ground.

An official of the CAQM said the commission has improved coordination and planning. "For example, though the paddy stubble burning, which is a source of severe pollution, happens in October-November, we start meeting State officials from February and coordinate till all the seasons are over," the member said. The CAQM had also coordinated with Punjab and Haryana to prepare action plans for controlling stubble burning in 2022 and it is updated every year.


About challenges that the commission faces, the official said, "Over the years, though we were looking at different sources of pollution and trying to control them, our main focus was on controlling stubble burning. But from now onwards, we will try to focus on multiple areas. We will be putting more energy and time on controlling dust and vehicular pollution too."


Asmita Keshavnandani, executive director, Centre for Science and Environment, said that the decision to impose GRAP should be taken proactively by the CAQM. Pollution forecasting methods have to be more accurate, she added.


Topic → Commission for Air Quality Management (CAQM)




Overview

 Establishment: The CAQM was established in the National Capital Region (NCR) in 2020 through an ordinance, later replaced by an Act of Parliament in 2021.

 Purpose: Its primary goal is to enhance coordination, research, and resolution of air quality issues in the NCR and surrounding areas.

 Membership: Initially comprised of 15 members, the CAQM now has 27 members, including officials from the environment ministry, state governments, and NGOs.

 Leadership: The CAQM is currently headed by Rajesh Verma.

 Replacement of EPCA: The CAQM replaced the Environmental Pollution (Prevention and Control) Authority (EPCA), which was established in 1998 but lacked statutory backing.

🚫 Limitations of EPCA: The EPCA faced criticism for its inability to enforce compliance with its orders due to the lack of legal authority.


📋 Continuity of Measures: Many measures currently implemented by the CAQM, such as the Graded Response Action Plan (GRAP), originated under the EPCA.

Summary: The CAQM, established in 2020 and strengthened by legislation in 2021, aims to improve air quality management in the NCR, replacing the ineffective EPCA and expanding its membership and authority.


Air Quality Management in NCR: Challenges and Criticisms




Overview of CAQM Authority


 CAQM Authority: Established under the 2021 Act to protect and improve air quality in the National Capital Region (NCR) and adjoining areas.


Enforcement and Accountability

 Enforcement Powers: CAQM can issue directions, take necessary measures, and handle complaints related to air quality management.

 Accountability Measures: Section 14 of the Act allows CAQM to initiate strict actions against non-compliant officials.

Criticism and Challenges

 Supreme Court Criticism: Criticized for ineffectiveness and non-compliance with the Act.

 Delayed Actions: Notably slow in implementing Stage IV restrictions under the Graded Response Action Plan (GRAP).

Why is there a row over climate finance?



What are the prickly issues of the 29th edition of the Conference of Parties on global warming? Why is there bickering over a collective step towards ending the reign of fossil fuels and addressing rising carbon emissions? What are the concerns raised by developing nations?

Jacob Koshy

The story so far:

The 29th edition of the Conference of Parties (COP), arguably the most important of the UN's climate conferences, was scheduled to end on November 22, after 11 days of negotiations, and take a collective step forward in addressing rising carbon emissions. However, deliberations are expected to carry on beyond the deadline with several sticking points outstanding.

What is the significance of COP29?

Going into the talks, developing countries had stated that at least a trillion dollars per year from 2025-35 would be necessary to meet emission targets. This was seen to be the New Collective Quantified Goal (NCQG) on climate finance which refers to money that will be given to developing countries by developed countries to help the former meet their goals to transition away from the continued use of fossil fuels and curb greenhouse gas emissions. Developing countries have been repeatedly saying that the figure should be “trillions of dollars.” To this end, developed countries have mobilised and transferred \$115 billion in 2021-22 – a controversial clause that has yet to be resolved

Developed countries, led by the European Union, say the demands of the developing world are unreasonably high

in the universal agreement – but per the Paris Agreement, a new target higher than \$100 billion must be agreed upon by 2025. The talks in Baku were expected to conclusively agree upon a number but there continues to be a sharp split between developed and developing countries on the quantum and other basic aspects of what this NCQG should look like.

What do developing countries want?

This block of countries include China, India and the Group of 77 countries. There are also other coalitions such as the Like Minded Developing Countries (LMDC), Least Developing Countries (LDC), Small Island Developing Countries (SIDS) etc. Nearly all developing countries fall into one or multiple groupings and while they have differences, they are largely agreed on the point that it is the developed countries that should pay the bulk of climate finance.

More importantly, they specified that this money had to be provided not only to help countries meet their Nationally Determined Contributions (NDC) but also buffer against existing threats of climate change, and make good for climate damage already wrought. The NDCs are targeted, voluntary plans by all countries to reduce carbon emissions by certain quantities until 2030. The NCQG, the developing countries say, should also reflect contributions by developed countries on the basis of their historical contribution to existing carbon concentrations in the atmosphere as well as their per capita GDP. To put this in perspective, it is important to note that even if all countries fulfilled their stated voluntary commitments, it would as of now only translate to a 2% cut, and this year – the latest scientific assessments suggest – carbon emissions will likely increase 0.8% over 2023.

What does the developed world say?

However developed countries, led by the European Union, say these demands are unreasonably high. They aver that “all actors” (read countries) should collectively work to hike up climate finance to \$1.3 trillion per year by 2035. While agreeing that they must “take the lead” they have only set a goal of \$250-300

billion by 2035 per year. Moreover this would consist of a “variety of sources,” including “public and private, bilateral and multilateral, and alternative sources.”

This suggests that another major demand of the developing world, of ensuring most of the money is in the form of grants or low-cost loans, remains unmet.

Have any concrete agreements been made?

A week before the conference began, China had petitioned the Presidency of COP29 to discuss “climate-change related unilateral restrictive trade measures” at the conference. This is an unusual request as trade issues are discussed on forums such as the World Trade Organization. China proposed this as part of a grouping of countries called BASIC (Brazil, South Africa, India, China).

The petition is primarily directed at a European Union proposal called the Carbon Border Adjustment Mechanism (CBAM), which imposes a tax on products imported into the EU that don't conform to carbon-emission norms required by the Union. The CBAM is currently operating in a “transitional phase” but will come into full effect from January 1, 2026.

The first day of the conference saw an agreement on carbon markets to be supervised by the UN. Such a market would allow countries to trade carbon credits – certified reductions of carbon emissions – among themselves and whose prices are determined as a consequence of emission caps imposed by countries.


The market itself follows from a section in the Paris Agreement, called Article 6. Sub-sections within the Article spell out how countries can bilaterally trade carbon among themselves (Art 6.2) and participate in a global carbon market (6.4). Though most of the necessary nuts and bolts to make operational such a carbon market, supervised by a United Nations body, were in place since 2022, there were several niggles, particularly on ensuring that the carbon credits generated are genuine and its antecedents are transparent.


While there is criticism among environmentalist groups that enough discussions on this didn't take place, this is supposed to be a mechanism to facilitate climate finance. India has been discussing bilateral deals to trade carbon with several countries. An agreement such as the one in Baku could be a catalyst, and activate India's own carbon-trading market.





No agreement yet: Activists participate in a demonstration at the COP29 UN Climate Summit, in Baku, Azerbaijan on November 23. AP


Topic → About COP29 AND Climate finance

 COP29 Overview: The 29th edition of the Conference of Parties (COP29) is a crucial UN climate conference aimed at addressing rising carbon emissions, scheduled to conclude on November 22 after 11 days of negotiations.

 Extended Negotiations: Deliberations are anticipated to extend beyond the deadline due to unresolved issues among participating countries.

 Financial Needs: Developing countries have emphasized the need for at least \$1 trillion annually from 2025 to 2035 to meet emission targets, highlighting the New Collective Quantified Goal (NCQG) for climate finance.

 Developed vs. Developing Countries: There is a significant divide between developed and developing nations regarding the financial commitments, with developing countries insisting on "trillions of dollars" for support.

 Current Contributions: Developed countries mobilized and transferred \$115 billion in climate finance during 2021-22, but this amount is still under debate in the context of a universal agreement.

July
17

Paris Agreement Targets: According to the Paris Agreement, a new climate finance target exceeding \$100 billion must be established by 2025, which remains a contentious point in the negotiations.



Ongoing Disputes: The talks in Baku were expected to finalize the NCQG, but fundamental disagreements persist regarding the amount and structure of the financial support.

Key note → COP29 is a pivotal climate conference facing extended negotiations over financial commitments, with developing countries demanding at least \$1 trillion annually to meet emission targets

COP29 Climate Conference Overview



COP29 Overview

Event: The 29th Conference of Parties (COP29) is a significant UN climate conference.

Objective: Addressing the challenge of rising carbon emissions.

Timeline: Scheduled to conclude on November 22 after 11 days of discussions.

Extended Negotiations

Expectation: Negotiations may extend beyond the deadline.

Reason: Unresolved issues among participating countries.

Financial Needs

Developing Countries' Demand: At least \$1 trillion annually from 2025 to 2035.

Focus: New Collective Quantified Goal (NCQG) for climate finance.

Developed vs. Developing Countries

Divide: Significant differences in financial commitments.

Developing Countries' Stance: Insistence on "trillions of dollars" for support.



Current Contributions

Developed Countries' Contribution: \$115 billion mobilized and transferred in 2021-22.

Debate: Amount is still under discussion for a universal agreement.



Paris Agreement Targets

Requirement: New climate finance target exceeding \$100 billion by 2025.

Contention: Remains a contentious point in negotiations.



Ongoing Disputes

Location: Talks in Baku.


Expectation: Finalization of the NCQG.

Issue: Fundamental disagreements on financial support amount and structure.


Climate Finance and Developing Countries





Key Points


 Developing Countries Coalition: Comprises China, India, Group of 77, LMDC, LDC, and SIDS, representing diverse nations with common goals.


 Climate Finance Responsibility: Developing nations argue that developed countries should shoulder the majority of climate finance obligations.

 Nationally Determined Contributions (NDCs): Voluntary plans by countries to cut carbon emissions by 2030, with developing nations seeking support.

 Addressing Climate Threats: Funding is essential not only for NDCs but also to mitigate current climate impacts and compensate for historical damages.

 Historical Accountability: Developing countries insist that climate finance should reflect developed nations' historical emissions and per capita GDP.

 Insufficient Emission Reductions: Current pledges would result in only a 2% emissions reduction, with a projected 0.8% increase in 2023.

 Call for Action: Urgent need for developed countries to fulfill their commitments and effectively combat climate change.

Climate Finance and Carbon Market Developments at COP29



Developed Countries' Stance:

Developed nations, led by the EU, propose a climate finance target of \$250-300 billion annually by 2035, contrasting with the \$1.3 trillion requested by developing countries.

Funding Sources:

The proposed climate finance will be sourced from a combination of public and private sectors, including bilateral and multilateral funding, but lacks emphasis on grants or low-cost loans as preferred by developing nations.

China's Petition:

China, representing the BASIC group, has called for discussions on trade measures related to climate change at COP29, focusing on the EU's Carbon Border Adjustment Mechanism (CBAM).

CBAM Overview:

The CBAM will impose taxes on imports not meeting EU carbon-emission standards, with full implementation expected by January 1, 2026.



Carbon Market Agreement:

An agreement was reached to establish a UN-supervised carbon market, enabling countries to trade carbon credits based on emission reductions.



Paris Agreement Reference:

The carbon market initiative is grounded in Article 6 of the Paris Agreement, which provides mechanisms for bilateral and global carbon trading.



Concerns and Criticism:

Environmentalist groups have raised concerns about the lack of comprehensive discussions on the carbon market, stressing the importance of genuine carbon credits and transparency.

Summary: Developed countries propose lower climate finance targets, while a new carbon market agreement aims to facilitate trading among nations, amidst ongoing concerns from developing nations and environmentalists.

Tests show that minke whales can hear high-frequency sounds

The Hindu Bureau

For the first time, scientists have directly measured the hearing range of minke whales, discovering that the species can detect high-frequency sounds as high as 90 kilohertz (kHz), according to a new study, demonstrating hearing sensitivity far greater than previously believed.

The findings suggest that baleen whales – the planet's largest mam-

mals – may be even more impacted by anthropogenic ocean noise than currently recognised but have been excluded from regulatory consideration due to underestimated hearing ranges. There have been concerns about the impacts of anthropogenic noise on marine mammals like high-profile whale stranding events linked to naval sonar noise activity. As a result, substantial progress has been made in de-

veloping criteria and thresholds for evaluating impacts on marine mammals exposed to anthropogenic noise.

Although researchers have suggested using behavioural changes, hearing damage, and other physical effects to measure the impact of noise on marine mammals, setting clear thresholds is challenging because different species of marine mammals respond to noise in widely va-

riety and poorly understood ways. Audiograms – graphs illustrating an animal's hearing sensitivity – are essential for identifying the sound frequencies that affect marine mammals.

However, while audiograms are available for at least one representative species in most major marine mammal groups, none exist for baleen whales. To better understand how ocean noise im-

pacts baleen whales, researchers developed a novel catch-and-release method to temporally hold adolescent minke whales (*Balaenoptera acutorostrata*) for auditory evoked potential (AEP) tests, which estimate hearing sensitivity by measuring electrical signals produced in the brain in response to sound. Leveraging a natural channel between two islands in Norway, and a system of net barriers, the research-


ers contained two adolescent minke whales making their northward migration.


While it has been assumed that baleen whales are exclusively low-frequency hearing specialists, the authors discovered that minke whales can detect frequencies as high as 45 to 90 kHz – a range much higher than previously believed based upon their ear anatomy and the frequencies at which they vocalise.


Topic → Minke Whales' Hearing Sensitivity: New Insights





Key Findings


 First Direct Measurement: Scientists have directly measured the hearing range of minke whales, revealing their ability to detect sounds up to 90 kHz.


 Greater Sensitivity: Minke whales exhibit a hearing sensitivity significantly greater than previously thought.

 Impact of Ocean Noise: The study suggests that baleen whales may be more affected by human-made ocean noise than currently recognized, potentially leading to regulatory oversights.

 **Concerns Over Stranding Events:** There are ongoing concerns about the effects of anthropogenic noise on marine mammals, including whale stranding events linked to naval sonar activities.

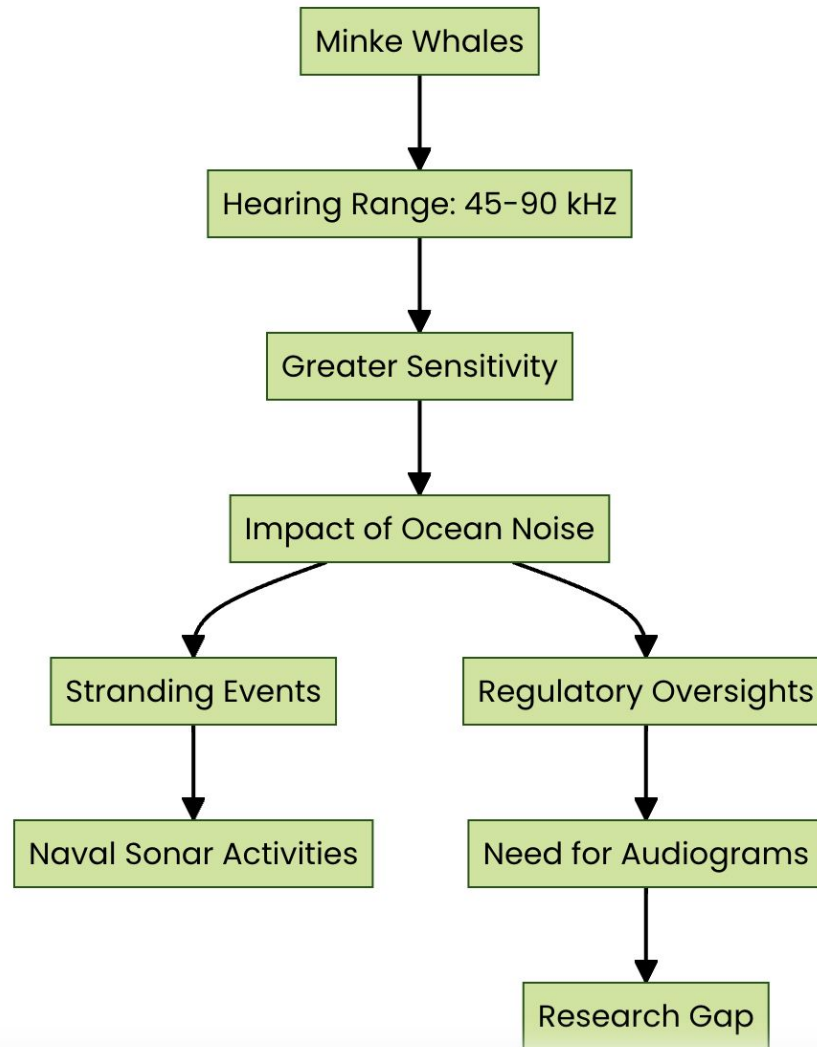
 **Need for Audiograms:** Audiograms are crucial for understanding marine mammals' hearing sensitivity, yet none exist for baleen whales, highlighting a research gap.

 **Innovative Research Method:** Researchers developed a novel catch-and-release method to conduct auditory evoked potential tests on adolescent minke whales.

 **Unexpected Hearing Range:** Contrary to the belief that baleen whales are low-frequency specialists, minke whales can detect high frequencies between 45 to 90 kHz.








Summary

A new study reveals that minke whales can hear sounds up to 90 kHz, indicating greater sensitivity and potential impacts from ocean noise, while highlighting the need for more research on baleen whale hearing.



Minke Whales: An Overview



-  Minke whales are the smallest members of the baleen or "great" whale family.
-  They are one of the most abundant rorqual species globally, with a stable population status.
-  Commercial whaling has negatively impacted minke whale populations in specific regions, such as the western North Pacific and northeastern North Atlantic.
-  The decline of larger whale species due to overexploitation has potentially benefited minke whales by reducing competition and increasing food availability.
-  Minke whales are considered to have a stable population compared to other large whale species.
-  They belong to the rorqual group, which includes other large baleen whales.
-  Their population status is stable across most of their range, contrasting with the status of other whale species.

From lactating ferrets to suckling pups

H5N1 virus of 2.3.4.4b clade shows a marked preference for the mammary gland

- H5N1 viruses were once considered to rarely infect mammals and not likely to spread among mammals. But that has changed since 2022

- H5N1 virus of 2.3.4.4b clade has infected a variety of mammals — sea lions, dolphins, otters, elephant seals and cows

- As on November 18, 55 H5N1 cases have been reported in humans in the U.S., and the 2.3.4.4b clade of H5N1 has spread to 553 dairy herds across 15 States in the U.S.

- The presence of virus in the mammary gland suggests active viral replication within the gland



Viral spread: Viral RNA titers significantly increased in milk over time and remained high in the mammary gland tissue

- The virus had spread from lactating ferrets to suckling pups; the pups had significantly increased viral RNA in the oral and nasal cavity

- Viral RNA levels in the lungs were low in the lactating ferrets but high in the suckling pups

- H5N1 virus caused 100% fatality in lactating ferrets and suckling pups










Tree islands help restore nature in oil palm plantations

An investigation on how ecological restoration promotes biodiversity recovery in oil palm plantations in Sumatra found that establishing islands of trees within large oil palm monocultures can promote the recovery of native tree diversity. Researchers established 52 tree islands of varying sizes and diversity of planted trees in a conventional industrial oil palm plantation in Sumatra. Native species successfully colonised the tree islands, including trees that are endemic to Sundaland.

Topic → Ecological Restoration in Oil Palm Plantations



Key Insights

-  Ecological Restoration: Focuses on enhancing biodiversity within oil palm plantations.
-  Tree Islands: 52 tree islands of varying sizes and tree diversity were created in a large oil palm monoculture.
-  Native Tree Recovery: Successful colonization of native tree species was observed in the tree islands.
-  Endemic Species: Some colonizing species are endemic to the Sundaland region.
-  Oil Palm Monoculture: The study took place in a conventional industrial oil palm plantation in Sumatra.
-  Biodiversity Promotion: Tree islands significantly promote the recovery of native tree diversity in monocultures.
-  Research Significance: Highlights the potential of ecological restoration practices to improve biodiversity in agricultural landscapes.

Summary: The study demonstrates that creating tree islands in oil palm plantations can enhance the recovery of native tree diversity, including endemic species




Body size of paper wasps is larger nearer the equator


A study of the correlation between environmental variables such as latitude and body size in paper wasps concludes that the nearer the habitat of a species to the equator, the larger its body size. The findings refute for these insects a 19th-century theory that predicts larger body size at higher latitudes or in colder regions of the planet. It found that species living in warmer, less seasonal habitats closer to the equator tend to be larger than species living at higher latitudes, where temperatures are lower.


Topic -- environmental variables and body size in paper wasps.




 A study examines the relationship between environmental variables and body size in paper wasps.


 Findings indicate that wasp species closer to the equator exhibit larger body sizes.

 The results contradict a 19th-century theory suggesting larger body sizes at higher latitudes or in colder climates.

 Species in warmer, less seasonal habitats are generally larger than those in cooler, more seasonal regions.

 The research highlights the impact of habitat temperature on the physical characteristics of wasps.

 The study emphasizes the importance of environmental factors in shaping species traits.

 The findings are specific to paper wasps and may not apply to other insect species.


Summary: The study reveals that paper wasps are larger in equatorial regions, challenging previous theories about body size and latitude





Groundwater pumping drives rapid subsidence in California


A new study shows land in California's San Joaquin Valley has been sinking at record-breaking rates over the last two decades as groundwater extraction has outpaced natural recharge. The average rate of sinking for the entire valley reached nearly an inch per year between 2006 and 2022. Additional analysis suggests that San Joaquin Valley aquifers require approximately 220 billion gallons of water coming in to prevent future subsidence.


Topic -- Land subsidence and groundwater


 California's San Joaquin Valley has experienced significant land subsidence over the past 20 years.

 The average sinking rate for the valley was nearly one inch per year from 2006 to 2022.

 Groundwater extraction in the region has exceeded the natural recharge rate, contributing to the subsidence.

 A study indicates that to prevent further sinking, the aquifers need about 220 billion gallons of water annually.

 The issue of land sinking is linked to unsustainable water management practices in the area.

 The findings highlight the urgent need for water conservation and management strategies in California.



Question Corner

Pheromone trails

How do ants selectively travel to the food source that is the shortest distance from their nests?

Researchers have discovered that in a foraging ant's search for food, it will leave pheromone trails connecting its colony to multiple food sources when they are available, successfully creating the first model that explains the phenomenon of trail formation to multiple food sources. Foraging for resources is an essential process for the daily life of an ant colony, and ants will self-organise using chemical pheromones. Once an ant detects a food


source, it secretes a chemical trail to lead other ants to the source. Using computational simulations of ants searching for food, stochastic modeling, and a system of partial differential equations, the researchers also observed that over time, ants will selectively travel to the food source that is the shortest distance from its nest. "If one food source was just slightly closer to the ants' nest, the ants would eventually form one singular trail to the closest source," Florida State University researcher Bhargav Karamched said.

Readers may send their questions / answers to questioncorner@thehindu.co.in


Topic → Ant Foraging Behavior and Trail Formation





Overview

 Researchers have developed a model to explain how foraging ants create trails to multiple food sources.

 Ants use pheromone trails to link their colony with available food sources.

 The study employed computational simulations, stochastic modeling, and partial differential equations to examine ant behavior.

 Over time, ants tend to select the food source nearest to their nest, resulting in a single trail.

 The research underscores the self-organizing nature of ants through chemical communication.

 Foraging is vital for the survival and daily operations of ant colonies.

 The findings enhance the understanding of collective behavior in social insects.

Summary: The study models how foraging ants utilize pheromone trails to connect their colony to various food sources, eventually preferring the nearest one.

Critically evaluate the challenges faced by prisoners with disabilities in India highlighted the gaps in policy implementation and suggest strategies to bridge them (200 words)

Indian prisons have long-term history of poor conditions, including violence, mistreatment and ~~neglect~~ systematic neglect co-existed.

Mulla Committee Report had suggest few recommendations for prisoner reform, but largely ignored as existing ~~substandard~~ conditions worsened condition of prisoners.

Current status of prisoners

According to (NIRB data) highlighted about 5.73 lakh prisoners incarcerated in reformative centers

due to over crowding leads to unequal resource distribution, lack of facilities due to arise violence and abusive behavior toward another prisoner.

- 1) Prisoners with disabilities:- Vulnerabilities do inaccessible of health services and ignores basic facilities.

~~Fig~~ ~~(Santika)~~ (2018) Audit finding)

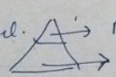
U.P.S.C.

Q How does Durkheim's concept of Anomie Remain Relevant in contemporary Sociology discourse?

According to Emile Durkheim (1858-1917) his prominent study (division of labor in society) have been elaborated about social fact (DA) is the material social fact in which society has been categorized into two category solidarity society primitive society (undifferentiated social structure of society based on collective responsibility) in that in 19th century increased social disintegration brings morality criticised society having to stable objective based these Durkheim says (Anomie) in contemporary in society also realizing these anomie society turned to stable organic society increasing to penetration individualistic ideas cause to increase specialization

U.P.S.C.

(Division of Labor) brings narrow range of task according to Durkheim these change affect social fact individual control as pathological change in that (DA) stopped individual as occupation centered based environment that led to disrupt bonding between another group and integration with another occupation disbreak knowledge sharing cause led to increase social inequality in society among (social fact) two level.



→ materialistic social fact
→ Non materialistic social fact in contemporary society ~~emphasized~~ rapidly of organic penetration & guide egoistically. Cause of alienness family role decreasing rapidly materialistic youth's thinking ~~that~~ that led to increase to social disintegration, collapsing morality.

आकलन **(AAKLAN) PLUS FOR UPSC**

2025/26

**IAS MAINS ANSWER WRITING
PROGRAM + Test series**

- **3 months - validity - 35 Answer evaluation. + 2 full length Test + 1 essay**
- **6 month validity - 70 Answers evaluation + 2 full length Tests + 2 Essay**
- **1 year validity - 200 + Answers evolution + five 1 to 1 session with sir + 10 full length tests + 5 essays**

Both English and Hindi



Download saurabh pandey cse app
visit - saurabhpandeyupsc.com and click all courses

Comprehensive course on **ADVANCE CURRENT AFFAIRS BOTH FOR PRELIMS AND MAINS 2025**

Includes

2 yrs coverage

- The Hindu Newspaper subjectwise coverage
- Yojana magazine
- Down to earth
- PIB
- Physics.org
- Mains qs
- Prelims Practice set



BY SAURABH PANDEY SIR

FOR UPSC
2025/26

NEW BATCH
LAUNCHED

Connect with sir
9057921649

LIVE

AGRICULTURE OPTIONAL

NEW BATCH LAUNCHED

For UPSC IAS
/IFoS 2025/26

For any Question message-
9057921649

SCORE 300+

BY Saurabh pandey sir



UPSC CSE PRELIMS TEST
SERIES FOR 2025

NEXT TEST
ON
MONDAY
9:30 AM

- Total 30 tests
- Includes advance current affairs and static
- Revision PDF



BY SAURABH PANDEY SIR

Msg-9057921649

Course on Complete Ethics
and Integrity

GS PAPER 4

250 Marks

Also include ARC
Report on ethics
in Governance

By saurabh
pandey sir

FOR UPSC
2025/26

Notes with mind
Maps

LIVE



Master Essay Writing

Connect with sir 90579 21649

ESSAY

- Total 50 ESSAY
- Model essay
- VIDEO lectures
- Evaluation of Essay

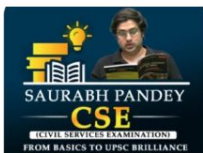
Download -saurabh
pandey cse APP



BY SAURABH PANDEY SIR

TARGET 140+

We're fine-tuning our website in beta mode for the best experience. We're working tirelessly to ensure it's top-notch... Also please join us on Telegram



Categories ▾

🔍 Search for anything...

Login

Visit - saurabhpandeyupsc.com

Home Courses ▾ Pages ▾ More ▾ About UPSC Exam ▾ Current-Affairs Pointers ▾

YouTube Channel

All Courses



All Courses

Current Affairs 22nd & 23rd SEPTEMBER 2024

Current Affairs 21st SEPTEMBER 2024

Current Affairs 20th SEPTEMBER 2024

Popular Courses

Connect with sir
9057921649 (ONLY MSG)

See More →

Mains Module and Integrity
FOR UPSC 2025/26
GS PAPER 4
250 Marks
Also include ARC report on ethics in Governance
By saurabh pandey sir
Notes with Maps
LIVE

Best Course On Ethics And Integrity For UPSC...

Admin

Mains Module Writing
ESSAY
Connect with sir 90579 21649
Starting 9th September 2024
• Total 50 ESSAY
• Model essay
• VIDEO lectures
• Evaluation of Essay
TARGET 140+
BY SAURABH PANDEY SIR

Master The Art Of Essay Writing With This...

Admin

GS PAPER 1
Mains Module
Mains special
Connect with sir 90579 21649
starting 10th Sep 2024
Complete course on Society, globalisation, Regionalism, communalism (FOR UPSC 2025/26)
BY SAURABH PANDEY SIR

Course On Society , Globalisation...

Admin

GS PAPER 3
Mains Module
Mains special
Connect with sir 90579 21649
starting 10th Sep 2024
Complete course on Cybersecurity, Disaster Management and Border management (FOR UPSC 2025/26)
BY SAURABH PANDEY SIR

Complete Course On Cyber Security ,Disaste...

Admin





Saurabh Pandey CSE

Saurabh Pandey CSE

4.8★

77 reviews

1K+

Downloads

3+

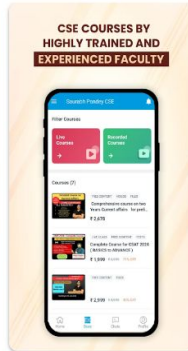
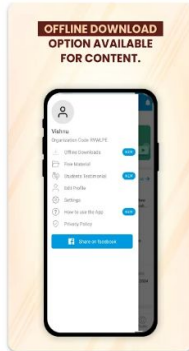
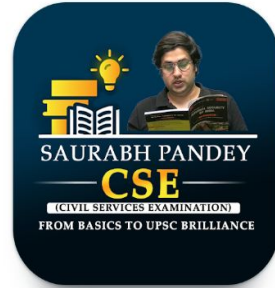
Rated for 3+ ○

Install

Share

Add to wishlist

This app is available for your device



App support ▾

PDF Download → <https://t.me/gesreporter>



THE HINDU Analysis By saurabh sir for upsc
1 882 subscribers

Pinned Message
The hindu session is live 🔥🔥🔥

<https://youtu.be/JQC9g4tXVI?si=8L4HsagHQ2TVDEiQ>

YouTube
30th & 29th September 2024 | The Hindu Editorial & News Analysis | Daily current affairs | S pandey
#thehinduanalysisbysaurabhpandey #dailycurrentaffairs #thehinduanalysis #thehinduanalysisbysaurabhpandey #Saurabhpandeyupsc
Session covers the hind...



162 👁 11:37 AM

Saurabh pandey UPSC
<https://youtu.be/JQC9g4tXVI?si=8L4HsagHQ2...>
The hindu session is live 🔥🔥🔥 176 👁 11:37 AM

THE HINDU Analysis By saurabh sir for upsc pinned "The hindu session is live 🔥🔥🔥"

sp sir 29th and...24 the hindu.pdf
5.8 MB · 164 👁 12:20 PM

Broadcast

Target Mains -2025/26 -

Q International institutions may not control foreign affairs. Elucidate

**Connect with sir
9057921649**

**send your answer - Saurabh pandey
upsc telegram channel**





