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ANALYSIS

Topics

Detailed Analysis for Prelims & Mains:

1. Why do cities get polluted in summer? - Pg 14
2. IMEC is caught between commerce and geopolitics - Pg 6
3. Orbital rivalry - the challenge of China's space power - Pg 6
4. Iran halts US talks - Pg 14

Prelims:

1. New IIP series - Pg 1
2. Operation Mule Hunt - Pg 12
3. { PIB: BRICS Culture Working Group - Pg 12
4. } PIB: ISRO - Ministry of Jal Shakti MoU – Pg 12
5. PIB: Project UDAYAK

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Air Pollution → Summer ❄️

Why do cities get polluted in summer?

How is summer air pollution different from that in winter? Why does ozone rise in hot weather? What drives PM10 spikes in Indian cities? How do dust storms affect air quality? How do human activities worsen summer air pollution? What can cities do to combat summer air pollution?

In March, the **Commission for Air Quality Management** in the National Capital Region and Adjoining Areas (CAQM) revoked all curbs under the **Graded Response Action Plan (GRAP)**, signalling the end of the winter air pollution in Delhi.

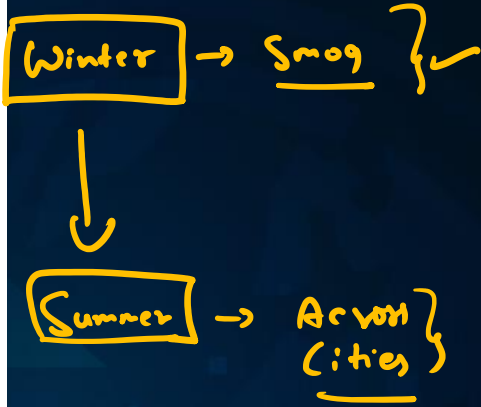
Winter

Dec - Feb

Delhi

April - May

A month later, as temperatures rose, it reimposed Stage 1 of the GRAP to combat summer air pollution. It was briefly revoked and reimposed again in May, while North India was reeling under heatwaves.



Summer brings in dust storms that hike PM10 levels, while heat and sunlight catalyse ozone formation. PTI

Why are cities witnessing pollution episodes during summer?

Delhi and the Indo-Gangetic plain are known for winter smog because low temperatures, low wind speeds, and their basin-like topography trap pollutants close to the ground.

PM_{2.5}

Summer brings stronger winds, occasional thunderstorms that wash out pollutants, and warmer temperatures that allow pollutants to mix higher in the atmosphere. Despite such meteorological favours, Delhi has already witnessed 54 days between 1 April and 31 May 2026 where daily average PM₁₀ levels exceeded the 24-hour National Ambient Air Quality Standard (NAAQS) of 100 µg/m³. At the same time, on 40 days, at least one Continuous Ambient Air Quality Monitoring Station (CAAQMS) in the city recorded a breach in the hourly ozone standard of 180 µg/m³.

Unlike most headlines, this is not the story of Delhi alone. Other large cities like Mumbai, Chennai, Hyderabad, Bengaluru, and Kolkata also recorded pollution spikes in the same period this summer, with PM₁₀ and ozone levels going above the national standards to varying degrees. These spikes were shaped by local sources such as vehicular emissions, road dust, construction activity, industrial emissions, and dust from local storms. Mumbai, for instance, has been recording high PM₁₀ and ozone levels over the last few years due to construction activity, dust, and traffic. While Chennai's PM₁₀ breaches are occasional, its high vehicular density and hot weather also make it an ozone hotspot.

The summer burden

Dust, heat, and urban emissions continue to drive pollution episodes across Indian cities even during summer

PM₁₀

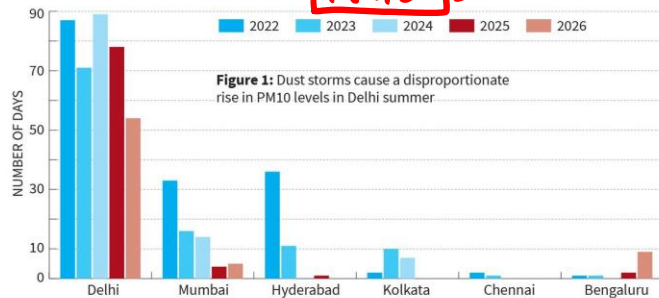
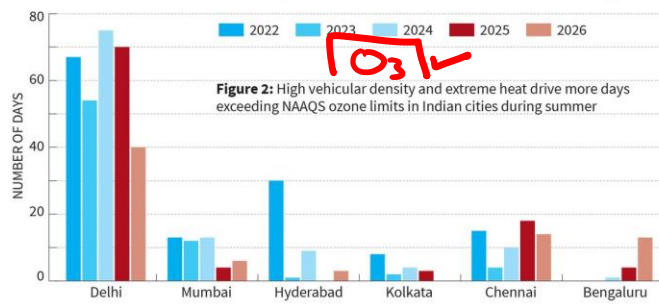


Figure 1: Dust storms cause a disproportionate rise in PM₁₀ levels in Delhi summer



O₃

Figure 2: High vehicular density and extreme heat drive more days exceeding NAAQS ozone limits in Indian cities during summer

Note: The data for 2026 is from 1 April to 31 May 2026. For other years, the data is from 1 April to 30 June.
SOURCE: CEEW ANALYSIS OF CAAQMS DATA

How is summer air pollution different from that in winter?

While winter pollution is dominated by finer PM_{2.5} particles, summer air pollution is driven by the coarser PM₁₀ and ozone.

Vehicles, industries, waste burning, agricultural residue burning, construction sites, and broken roads remain year-round sources of pollution. Winter adds biomass burning for heating. Summer brings in dust storms that hike PM₁₀ levels, while heat and sunlight catalyse ozone formation.

Why does ozone rise in hot weather?

Ozone is not emitted directly from a tailpipe or chimney. It forms when nitrogen oxides (NO_x), largely from vehicles and volatile organic compounds (VOCs) from industrial emissions, vehicle exhaust, paints, and other sources, react under strong sunlight. Hotter, sunnier days therefore create favourable conditions for ozone formation, which, along with particulate matter, could cause respiratory illnesses.

PM₁₀ ↑

(Vehicles)

Dust

O₃

Respiratory

What causes India's PM10 to spike?

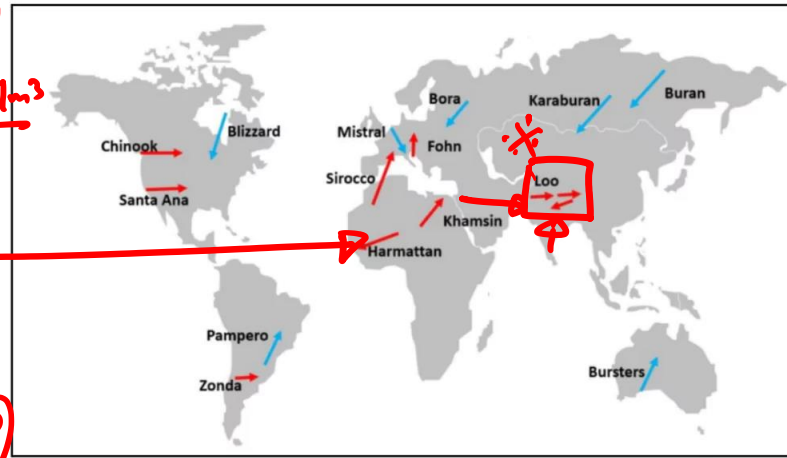
D 60 → 54 → PM10

Hot conditions over the Indian subcontinent create a low-pressure area that extends towards Iran. Its interaction with surrounding high-pressure areas produces hot, windy conditions. These winds could stir up dust storms, including hot winds called loo which carry dust from West Asia and the Thar Desert across India towards the Bay of Bengal. Such episodes could elevate PM10 levels for days, as seen during the severe North Indian dust storms of 2018.

100 μg/m³

The Indian subcontinent also experiences shorter, localised dust storms known as 'andhi' that usually subside within hours. These form when strong downward-moving air associated with thunderstorms hits the ground, lifts loose dust, and carries it at high speed. While loo-type dust storms are common in North India, cities like Mumbai and Hyderabad generally face dusty episodes due to local thunderstorms.

Human activity worsens this natural dust load. Construction and demolition work often resumes after the more stringent winter GRAP restrictions are lifted. Without adequate site-level dust control, these activities add to PM10 levels. Vehicles moving over broken roads also further resuspend loose, dry dust into the air in the dry summer months.



What can cities do to combat summer air pollution? EWS

While **natural sources of dust cannot be controlled**, they can be predicted. **Delhi's Air Quality Early Warning System (AQEWS)** was created in response to severe dust storms in 2018 and smog episodes of the previous years, and now runs year-round. It has since been extended to other cities such as **Jaipur and Mumbai**, and provides forecasts of multiple pollutants several days in advance. Its bulletin provides detailed weather information for Delhi and three-day Air Quality Index forecasts for 140 Indian cities.

The **India Meteorological Department (IMD)** also publishes **national weather forecast** bulletins several times a day. Authorities should use these systems to issue local alerts on dust storms, ozone, and poor air quality so citizens can reduce exposure.

For **controllable non-natural sources, enforcement matters**. Construction sites need active dust management even outside winter.

A study by the Council on Energy, Environment and Water (CEEW) found that simply **reducing heavy-vehicle movement at construction sites** can lower local particulate matter levels. The Brihanmumbai Municipal Corporation (BMC)'s Air Quality Decision Support System (AQDSS), also developed with CEEW, for example, assists in monitoring construction sites. It has already helped authorities take measures against more than 1,000 sites since October 2025 in Mumbai.

Reducing ozone requires **cutting NOx and VOC emissions from vehicles and industries** through cleaner transport, better compliance, and **attention to solvents, paints, and fuel combustion**. Even simple behavioural measures, like the 'Red Light On, Gaadi Off' campaign of the Delhi government that urges drivers to **switch vehicles off while waiting at junctions to reduce idling emissions**, can reduce ozone formation. But Indian cities need more sustained action.

Mains Practice Question

Q. How is summer air pollution different from that in winter? Examine the causes and suggest ways to combat the threat. (250 words; 15 marks)

IMEC is caught between commerce and geopolitics

IMEC

The ongoing war in Iran has shattered many myths and brought to light realities that expose the structural vulnerabilities of the existing world order. Iran, which was no match for the combined military might and technological superiority of Israel and the United States, has not only withstood the military onslaught but has also retaliated in ways that were neither expected nor planned for. Nearly three months into the conflict, although a fragile ceasefire is holding, there appears to be no immediate solution to end the war or achieve the politico-military objectives that Israel and the U.S. set at its outset. While Iran has suffered major losses to its leadership, infrastructure and military assets, the American military has also incurred unprecedented losses.

Lessons from the Iran conflict

A recent U.S. Congressional Research Service report has noted that 42 U.S. aircraft have been lost or damaged so far during “Operation Epic Fury” – the war with Iran – which includes fifth generation stealth fighters such as the F-35. Plus, the ability to intercept Iranian missiles and drones has been severely degraded as more than half the total inventory of Patriot, Tomahawk and Terminal High Altitude Area Defense (THAAD) missiles have been expended. With more than 240 American targets reportedly hit by Iran, the conflict has shattered the myth that military superiority alone will guarantee an outright victory. Several of the asymmetric tactics employed by Iran have caught the U.S. and Israel on the back foot.

Another reality check underscored by this war is the critical importance of global choke points and how their blockade can severely disrupt the global economy. Iran, by imposing a blockade on the Strait of Hormuz early in the conflict, has virtually brought the global economy to its knees. Nearly 20 million barrels of crude oil, accounting for about a third of global oil supplies, pass through this narrow sea passage every day. India is among the countries most affected, as it imports nearly 88% of its crude oil requirements, amounting to about 1.8 billion barrels annually. While the world grapples with the blockade and works to diversify its energy sources, one thing is clear: there is an urgent need to explore and develop alternative connectivity options beyond existing trade routes, particularly maritime routes. New routes and corridors must be developed that avoid the two ‘Cs’ – conflict zones and choke points.

However, this realisation is neither new nor have countries been idle in pursuing solutions. Transnational connectivity projects such as the International North-South Transport Corridor (INSTC) and the Belt and Road Initiative (BRI) were conceived precisely for this purpose. The INSTC was designed to bypass the Suez Canal



Rajeev Agarwal

Retired colonel,
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Consultant at CRF,
Delhi, and the author
of ‘Between Tehran
and Tel Aviv – Gaza’s
Story of
Unending War’

choke point, while the overland component of the BRI across Asia and Europe seeks to reduce dependence on both the Malacca Strait and the Suez Canal. Another major connectivity project is the India-Middle East-Europe Economic Corridor (IMEC). Unlike the other initiatives, IMEC traverses parts of West Asia, a region that has been significantly affected by the current conflict.

The IMEC framework

What is IMEC? The IMEC is a transformative and ambitious connectivity initiative that was officially announced at the G-20 Summit in New Delhi in September 2023. It seeks to connect India with Europe across the Arabian Peninsula, bypassing the traditional choke point of the Suez Canal. The project envisions a multimodal economic corridor integrating railways, ports, highways, energy networks and digital infrastructure to enhance trade, investment and connectivity. Unlike conventional transport corridors, IMEC is conceived as a holistic and multidimensional infrastructure project encompassing sea routes, rail networks, pipelines, undersea high-speed data links, green hydrogen corridors and transnational energy transmission grids.

The proposed structure has three distinct sections. The eastern section links India with West Asia through searoutes to the United Arab Emirates (UAE). The central section consists of an overland route across West Asia, traversing the UAE, Saudi Arabia, Jordan and Israel, and culminating at the port of Haifa on Israel’s Mediterranean coast. The western leg of the corridor is sea-based, connecting Haifa to various European ports, beyond which the continent’s extensive transportation network takes over.

What has happened due to the war? Soon after IMEC was announced, the war in Gaza broke out on October 7, 2023, placing the project on the back burner. Major areas of the originally envisioned corridor, particularly those involving Israel and the port of Haifa, were directly affected by the conflict.

Soon after the Iran-Israel ‘12-Day War’ in June 2025, there was a concerted effort to move the project forward. However, the ongoing conflict involving Iran has once again thrown a spanner into its execution. Key ports in the UAE, particularly Jebel Ali and Fujairah, have been repeatedly targeted by Iran, while disruptions in the Strait of Hormuz have exposed the geographical vulnerabilities of these ports.

Another critical fault line exposed by the war is the deep faultlines and divergence in the positions adopted by Saudi Arabia and the UAE in the war. Both countries are key partners in IMEC, and any adversarial posture between them could prove to be a major setback for the corridor, whose success depends on smooth coordination and seamless connectivity across the region. The UAE’s April 2026 announcement that it was

opting out of the global oil grouping, the Organization of the Petroleum Exporting Countries (OPEC) and reports of its growing strategic coordination with Israel, including the deployment of Israeli defence systems such as the Iron Beam, risk widening differences between Riyadh and Abu Dhabi. Such developments are unlikely to augur well for either regional stability or the future of IMEC.

Navigating the challenges

The war in Iran has highlighted two important issues for both West Asia and IMEC. First, there is an urgent need for projects such as IMEC that can bypass conflict zones and choke points. However, for such initiatives to succeed, they must also navigate the region’s geopolitical complexities, including the rapidly evolving dynamics among key partners such as Saudi Arabia and the UAE.

To address the first challenge, IMEC must evolve into a broader and more flexible framework while keeping open the possibility of reverting to the originally envisioned alignment once the conflict subsides. To this end, the option of developing key ports in Oman – such as Salalah, Duqm and Muscat – as eastern entry points could be explored, as they are located well away from the conflict-prone Strait of Hormuz. Similarly, on the western end, until the port of Haifa becomes a secure transit hub, a western spur passing through Egypt and terminating at one of its major Mediterranean ports could offer a viable alternative. Egypt already possesses the logistics ecosystem required to support IMEC, including the Suez Canal Economic Zone, six operational ports and four industrial zones specialising in green hydrogen, liquefied natural gas, shipbuilding and other future-oriented sectors.

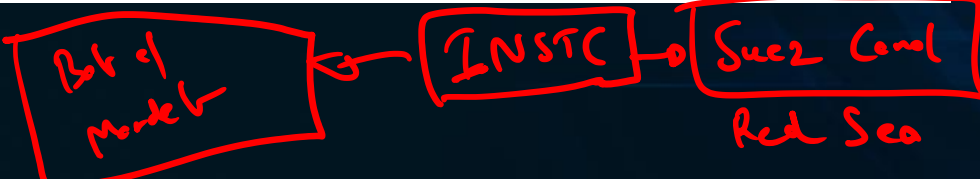
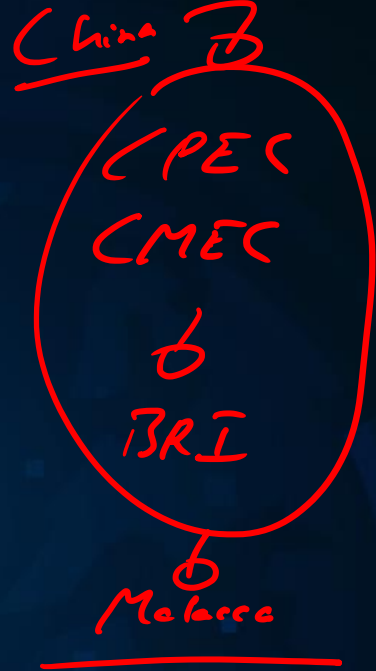
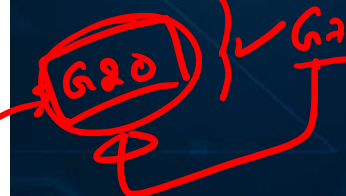
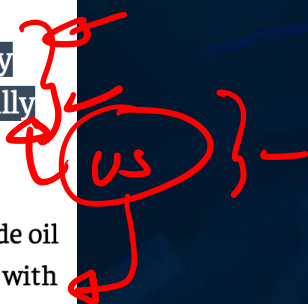
To address the second challenge, countries such as India, which enjoy close relations and the trust of both Saudi Arabia and the UAE, will have to navigate a delicate but critical diplomatic terrain. European countries such as Italy and France, which are positioning themselves as key champions of IMEC in Europe, will also need to play an active role. The growing recognition of IMEC’s strategic importance was evident during Prime Minister Narendra Modi’s visit to Europe in May 2026. While elevating their bilateral ties to a Special Strategic Partnership, India and Italy reaffirmed their commitment to cooperate on IMEC, recognising its transformative potential to reshape and promote global trade, connectivity and prosperity.

The bottom line is clear. The war in Iran has underscored the need for transnational connectivity projects such as IMEC that can bypass conflict zones and strategic choke points. However, for such initiatives to succeed, they must overcome the geopolitical complexities in West Asia.

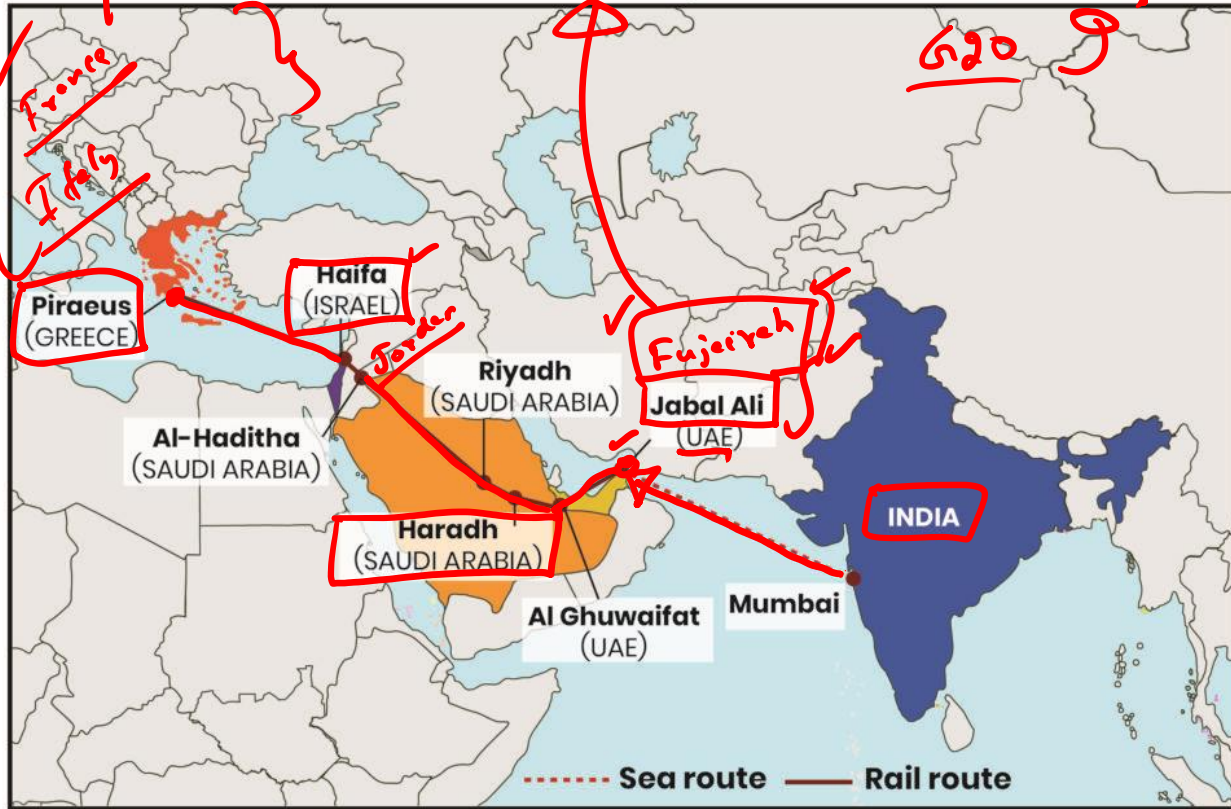
The Iran conflict strengthens the case for the India-Middle East-Europe Economic Corridor (IMEC) while simultaneously complicating its execution

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However, this realisation is neither new nor have countries been idle in pursuing solutions. Transnational connectivity projects such as the **International North-South Transport Corridor (INSTC)** and the **Belt and Road Initiative (BRI)** were conceived precisely for this purpose. The INSTC was designed to bypass the Suez Canal choke point, while the overland component of the BRI across Asia and Europe seeks to reduce dependence on both the Malacca Strait and the Suez Canal. Another major connectivity project is the **India-Middle East-Europe Economic Corridor (IMEC)**. Unlike the other initiatives, IMEC traverses parts of West Asia, a region that has been significantly affected by the current conflict.



India-Middle East-Europe Corridor (IMEC)



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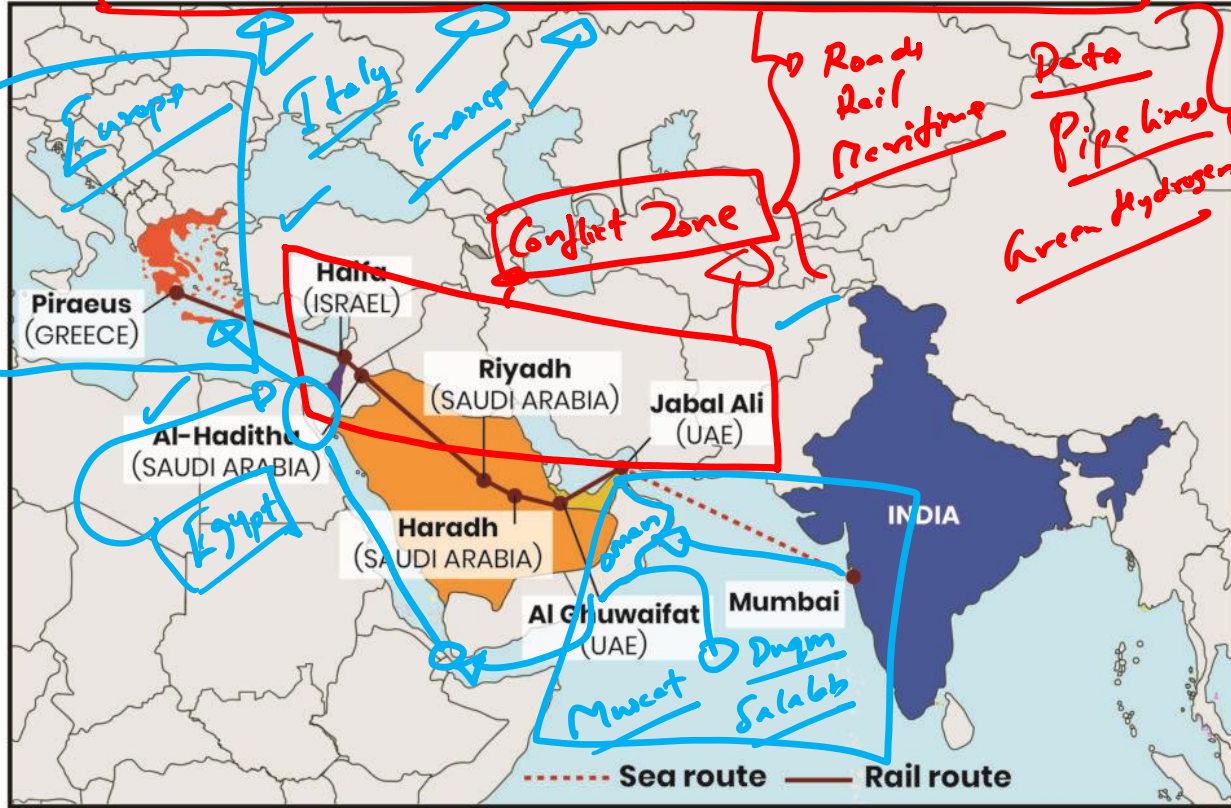
Gaza

Iran

Iraq



India-Middle East-Europe Corridor (IMEC)



Mains Practice Question

Q. The war in Iran has underscored the need for transnational connectivity projects such as IMEC that can bypass conflict zones and strategic choke points. Analyze.

(250 words; 15 marks)

Orbital rivalry — the challenge of China's space power

China's expanding counter-space capabilities are a cause for concern. While no conflict has ever been fought in space, the incentive to influence activities on earth by controlling outer space remains a potential trigger for future confrontation. Beijing's development of anti-satellite missiles and co-orbital systems blurs the line between routine space operations and counter-space activities.

The key question is how Beijing views its space ambitions and control of outer space, and what India can do to safeguard its vital interests in this domain.

Beijing's space ambitions

While the Chinese space programme emphasises the peaceful use of space, evidence suggests that China is preparing for an orbital war.

In January 2007, it targeted its own satellite from earth. In October 2015, China tested an exo-atmospheric vehicle designed to strike a hostile satellite. In 2022, China used a robotic spacecraft to push a defunct satellite into the graveyard orbit. In 2024, it demonstrated an orbital dog-fight. There is a clear research and developmental push for fielding offensive capabilities in space.

China's space ambitions operate at two levels. First, it seeks to remain competitive in the emerging space race, both technologically and numerically. China has around 1,900 satellites in orbit, compared to more than 8,000 American satellites, including the SpaceX satellites.

Second, it recognises the military and economic implications of the weaponisation of space. A single strike could disrupt communications, power grids, navigation systems, financial markets, and military command-and-control (C2) and intelligence, surveillance and reconnaissance (ISR) networks.

Accordingly, China aims to land on the moon by 2036, launch a nuclear-powered shuttle by 2040, and establish a solar power system by 2050. Chinese start-ups such as LandSpace, iSpace and OneSpace are challenging rivals such as SpaceX and Blue Origin. China is also exploring lunar and asteroid mining for energy



Harinder Singh

Former corps commander

China's counter-space rise demands stronger resilience and deterrence from India

and critical minerals. The growing demand for energy-efficient data centres is likely to further intensify the space race.

China is seeking to assert control over outer space in two distinct ways. First, by leveraging space-based assets to safeguard its military and economic systems. Second, by competing with its rivals – both numerically and technologically – to maintain space superiority. Its most immediate competition is with Starlink in low-earth orbit (LEO). China plans to deploy more than 36,000 LEO satellites by 2030. This rivalry could intensify if China were to become the first to establish a presence on the far side of the moon or demonstrate a particular interest in exploiting asteroid resources. Such developments could create an escalatory dynamic in an environment that lacks a comprehensive regulatory framework.

Consequently, China's capabilities are evolving in three key areas. First, kinetic attack systems such as the DN-3 and SC-19 missiles, which can physically destroy satellites. Second, laser-based systems that can dazzle or blind satellites, disrupting navigation and communications. Third, co-orbital satellites, such as the SJ and TJS series, designed to interfere with or dislodge other satellites from orbit. Together, these capabilities could enable the People's Liberation Army (PLA) to cripple Intelligence, Surveillance, and Reconnaissance (ISR), GPS and communication networks, shaping the battlespace during the first 24 to 48 hours of a conflict.

Implications for India

If a contingency arises in Taiwan, the PLA is likely to first blind ISR and communication networks before resorting to hard-kill attacks. This would give Beijing time to shape the narrative, whereas a hard kill could trigger immediate escalation.

The U.S. would then have to assess China's military objectives, and, if an invasion proceeds, neutralise its counter-space capabilities. While both sides may lose assets, the U.S. would likely retain an advantage due to its greater redundancy and resilience. The Taiwan scenario applies to

India albeit on a lesser scale. India has around 60 operational satellites as against 400-plus Chinese military satellites alone, which implies lesser redundancy. Losing five to six satellites will hurt India more.

Hypothetically, China could strike at the CARTOSAT/RISAT series, which could lead to loss of tactical-level imagery for hours, if not days. Instead, if it only choose to lase as these satellites as they pass over the Line of Actual Control, it could lead to temporary blind spots. They could even deploy jammers to disable India's NavIC system.

The key strategic takeaway is that while China can conduct peacetime harassment using lasers and jammers, or temporarily blind a few satellites during a border crisis, it cannot inflict crippling damage without destroying a large number of Indian satellites and risking severe Kessler Syndrome consequences. While Mission Shakti has strengthened India's deterrence posture, its utility remains restricted. Moreover, a single successful test does not guarantee operational reliability, and India still lacks co-orbital capabilities to counter satellites such as the SJ and TJS series.

Safeguarding India's interests

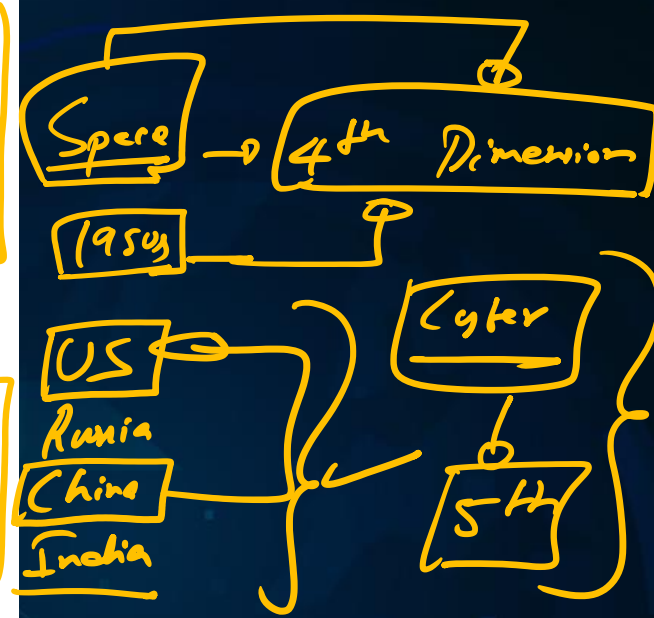
A few measures are pertinent. First, India must expand its space industry beyond the Indian Space Research Organisation to increase satellite production and launch capacity. Greater capacity translates into greater redundancy. Second, it should disaggregate large satellite programmes, such as GSAT, into smaller constellations, which are more resilient and survivable. Third, India must strengthen the protection of its ground space assets to mitigate the impact of hard-kill attacks. Fourth, it should enhance data-sharing arrangements with strategic partners so that, in the event of satellite losses, critical services can be restored through commercial or partner networks within hours.

Besides, India should also clearly define its red lines and the scope of a proportionate response to ensure that China fully understands the potential escalation ladder.

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Co-orbital → China vs USA

Starlink 6,000* 400

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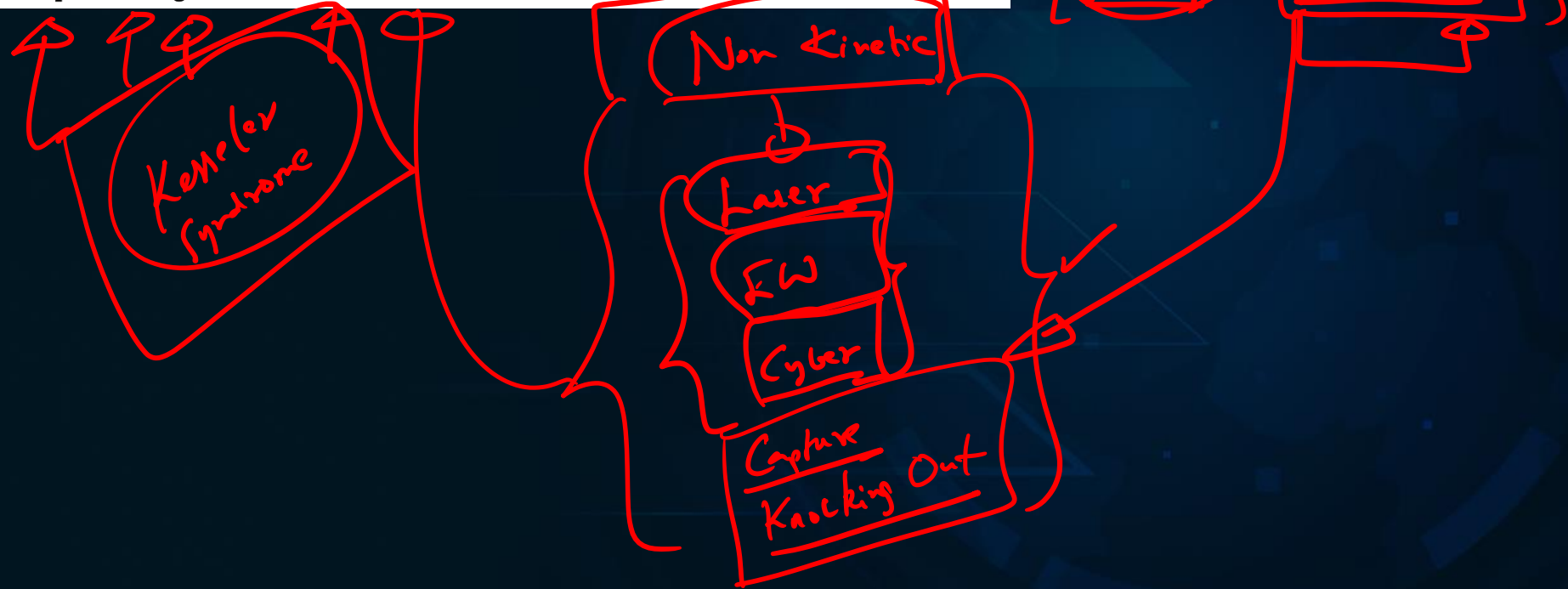
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400

2019 → Mission Shakti

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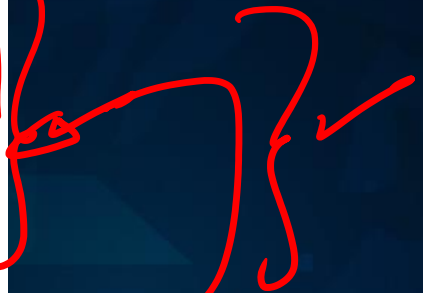
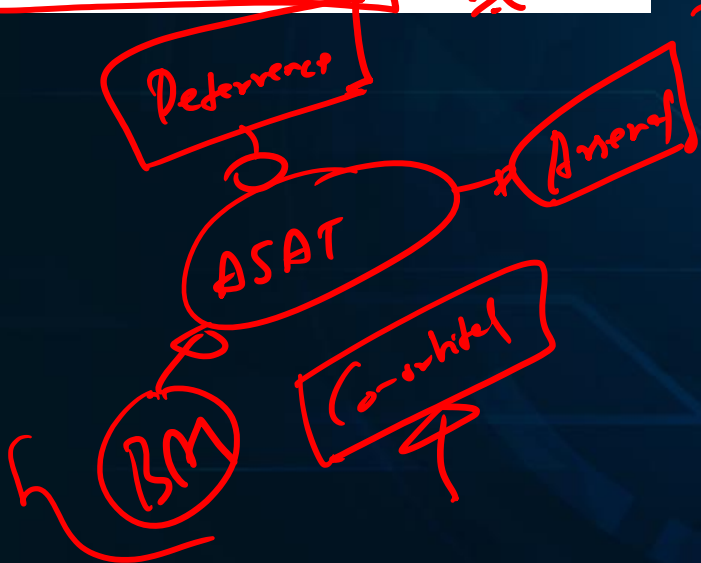
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ISRO → DRDO



Iran

US Talks – Suspended

All Fronts

Israel → Lebanon

Dahiyeh & Beirut

Iran halts U.S. talks over Israel's Lebanon war

'Ceasefire between Iran and the U.S. is unequivocally a ceasefire on all fronts, including in Lebanon; its violation on one front is a violation of truce on all fronts,' says Minister Araghchi; 'there will be no Israeli troops going to Beirut, and any troops on their way, have been turned back,' says Trump

Stanly Johny

Iran has suspended exchanges with the U.S. over a preliminary agreement aimed at ending the war, citing Israel's escalating military strikes in Lebanon, the Tasnim news agency reported on Monday.

Hours after Iran's move, U.S. President Donald Trump said he had spoken with Israeli Prime Minister Benjamin Netanyahu and Hezbollah, and that both sides agreed to stop attacking each other. He also said "talks are continuing with Tehran".

"Due to the continuation of the Zionist regime's [Israel] crimes in Lebanon and considering that Lebanon was one of the preconditions for the ceasefire



Onslaught continues: Smoke rises following an Israeli airstrike on the outskirts of Tyre in southern Lebanon on Monday. AFP

and now this ceasefire has been violated on all fronts including Lebanon, the Iranian negotiating team will stop "talks and exchange of texts through media", the report stated.

Earlier in the day, Iran's Foreign Minister Abbas Araghchi and Parliament

Speaker Mohammad Bagher Ghalibaf had warned of consequences for Israel's strikes on Lebanon.

"The ceasefire between Iran and the U.S. is unequivocally a ceasefire on all fronts, including in Lebanon. Its violation on one front is a violation of the

ceasefire on all fronts. The U.S. and Israel are responsible for the consequences of any violation," Mr. Araghchi wrote in a social media post.

Mr. Ghalibaf, who is also the country's negotiator with the U.S., said the American blockade of Iran's ports and the Lebanon strikes were ceasefire violations. "The naval blockade and escalation of war crimes in Lebanon by the genocidal Zionist regime are clear evidence of U.S. non-compliance with the ceasefire," he wrote in a post.

As the peace process seemed on the verge of collapse, Mr. Trump appeared to step in to salvage the ceasefire. "I had a very productive call with Prime Minister Bibi Netanyahu,

of Israel, and there will be no Troops going to Beirut, and any Troops that are on their way, have already been turned back," he wrote in a social media post. "Likewise, through highly placed Representatives, I had a very good call with Hezbollah, and they agreed that all shooting will stop – That Israel will not attack them, and they will not attack Israel."

In another post, Mr. Trump said talks with Iran are "continuing, at a rapid pace", without offering further details.

Beirut raid Earlier on Monday, Mr. Netanyahu said he has ordered the Israel Defence Forces (IDF) to strike Beirut's Dahiyeh neighbourhood, a Hezbollah strong-

hold, "in response to the repeated and ongoing violations of the ceasefire in Lebanon". Mr. Trump, who announced a ceasefire on April 17, had said then that Israel was "prevented" from striking Lebanon. But the IDF continued its military operations and captured more territory in southern Lebanon.

On Sunday, U.S. Central Command said it struck military targets in southern Iran over the weekend after Iran shot down an American drone. Hours later, Iran's Islamic Revolutionary Guard Corps said they attacked a U.S. military base in the region.

CENTCOM later claimed it intercepted "two Iranian ballistic missiles targeting American forces based in Kuwait.

Prelims Bytes

IIP

GDP

CPI

Industrial output slows to 4.9% in new data series

The base year has been revised to 2022-23 from 2011-12; growth rate in April was slower than 5.8% recorded in the corresponding period last year; mining and quarrying output declined by over 5%

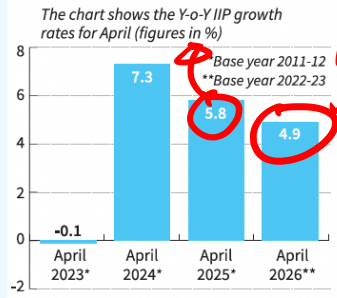
Ashokamithran T. MUMBAI

India's industrial output, as measured by the Index of Industrial Production (IIP), grew 4.9% in April 2026 under the revised series with 2022-23 as the base year released on Monday. The growth rate was slower than 5.8% recorded in April last year with 2011-12 as the base year.

The new series has broadened the coverage of the index by incorporating water supply, sewerage and waste management activities and gas supply, while retaining the existing three core sectors – mining, manufacturing, and electricity. Of the four sectoral indices, three grew at a slower pace and one shrunk in the reporting

Growth falters

Industrial output grew only 4.9% in April 2026, slower than 5.8% and 7.3% recorded in the same month in previous years



mining sector index will now include data classification for fuel minerals, metallic minerals, including rare earth minerals and non-metallic minerals, including minor minerals. Similarly, the electricity index has been classified into renewable and non-renewable sources.

The new basket of goods to calculate IIP consists of 1,042 products mapped to 463 item groups. The older series had just 839 items mapped to 407 item groups. Further, the weights provided to each sector and each industry within the manufacturing sector has been revised in line with the updated Gross Value Added (GVA) 2022-23 series.

month on a year-on-year basis. While mining and quarrying output declined by over 5.1%, manufacturing sector output grew at 6.2% in the reporting month, slightly slower than the 6.3% in 2025. The electricity and gas supply sector grew at 4.9% while water supply, sewerage and waste management grew at 6.6%.

The base years of major macroeconomic indicators, which were earlier 2011-12, were revised in 2026 beginning with the GDP. The IIP is the latest in the measures that have been revised to 2022-23 as the base year.

Besides adding new sectoral divisions, the new series also entails "improved granularity". For instance,

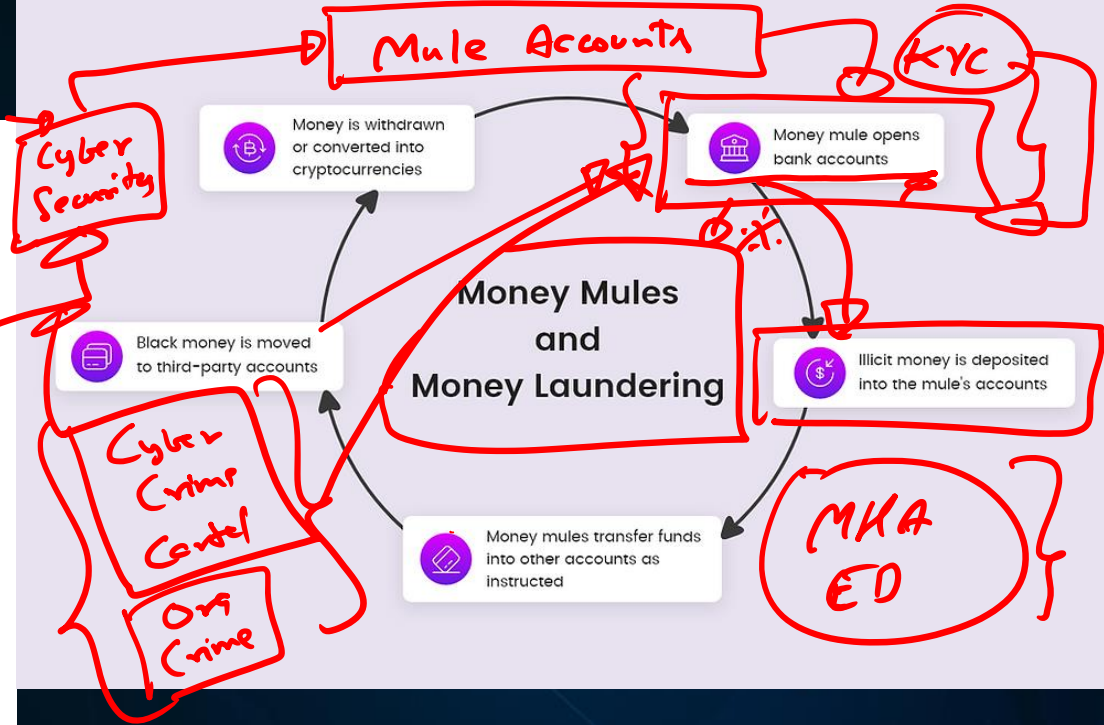
CONTINUED ON » PAGE 10

MAJOR CHANGE!
EARLIER GDP, NOW IIP



Operation Mule Hunt exposes cyberfraud network; 638 held

In one of Gujarat's largest crackdowns on cybercrime-linked financial networks, the State police have uncovered cyberfraud worth ₹2,289 crore and taken action against 913 mule bank accounts during a special operation aimed at dismantling the financial infrastructure used by cybercriminals. The crackdown, titled Operation Mule Hunt 1.0, led to the registration of 565 FIRs and the arrest of 638 accused, according to details shared by the State on Monday. The drive was conducted by the Gujarat Police and the Cyber Centre of Excellence under the supervision of Deputy Chief Minister Harsh Sanghavi as part of the government's broader effort to combat cybercrime, officials said.



Ethical use of AI in cultural space to be a key focus area at BRICS culture meetings



India to Host Second BRICS Culture Working Group Meeting in Varanasi on June 4-5, 2026

Three Priority Areas: Creative Economy & AI, Heritage Protection, Culture & Sustainable Development

Posted On: 01 JUN 2026 6:33PM by PIB Delhi

The Hindu Bureau
NEW DELHI

The ethical use of artificial intelligence in the cultural space will be one of the focus areas for discussion during the BRICS culture working group meetings beginning from Thursday, the Union Culture Ministry said on Monday.

Creative economy, culture climate and sustainable development and cultural and creative industries are some of the other areas of deliberation, Union Culture Secretary Vivek Agrawal said at a press conference in which he unveiled the comprehensive road map and calendar for the 2026 BRICS Culture Track.

He said that there was a line-up of major cultural events around the BRICS summit scheduled across

Varanasi is set to host 2nd Culture Working Group Meeting after the 1st CWG, which was held virtually

the country over the coming months. Varanasi is set to host second Culture Working Group Meeting, following the successful completion of the 1st Culture Working Group (CWG) meeting held virtually on April 29-30.

“As one of the world’s oldest living cities, Varanasi will serve as the backdrop for five critical thematic panel discussions aimed at shaping the final outcome document,” Mr. Agrawal said.

The five themes are: creative economy and people-to-people cooperation,

copyright and ethical AI in the creative economy, cultural heritage protection and return of cultural property, collaborative approaches to safeguarding shared heritage and culture as a driver of sustainable development.

The culture track will feature a total of four official meetings alongside major public festivals, bringing together the 11 member nations (Brazil, Russia, India, China, South Africa, Egypt, Ethiopia, Iran, Saudi Arabia, the UAE, and Indonesia) along with 10 newly joined partner countries. After Varanasi, the third BRICS CWG meeting would be held in Bhopal followed by the BRICS Culture Festival and the BRICS Culture Minister’s meeting. A BRICS theatre festival would be held in Delhi in October.

Priority Areas for Discussion

The 2026 BRICS Culture Working Group deliberations are structured around three major thematic priorities:

1. Creative Economy, Cultural and Creative Industries, Copyright and Artificial Intelligence
2. Cultural Heritage Protection and Return of Cultural Property
3. Culture, Climate and Sustainable Development

These priorities reflect a commitment to innovation, ensuring the ethical use of technology in cultural domains, preserving cultural diversity, advancing heritage conservation and restitution cooperation, and engaging with the global post-2030 sustainable development agenda.

Shri Vivek Aggarwal, Secretary, Ministry of Culture, today announced that the 2nd BRICS Culture Working Group (CWG) Meeting will be held in Varanasi, Uttar Pradesh on 4th - 5th June 2026. The announcement was made at a press conference held in New Delhi, which was also attended by Dr. Sachchidanand Joshi, Member Secretary, IGNSA; Smt. Amita Prasad Sarabhai, Additional Secretary; Dr. Arvind Kumar, Joint Secretary; and other senior officers of the Ministry. The two-day meeting, scheduled for 4-5 June 2026, will facilitate structured multilateral dialogue on cultural cooperation in keeping with India's BRICS 2026 theme: "Building for Resilience, Innovation, Cooperation and Sustainability."

India's Role in BRICS Cultural Cooperation

India has consistently played an active role in advancing cultural cooperation within BRICS. The Ministry of Culture hosted BRICS Meetings of Ministers of Culture under India's presidencies in Goa in 2016 and New Delhi in 2021, and continues to provide strategic leadership during its 2026 Chairship.

The BRICS Culture Working Group, which draws its mandate from the Agreement between the Governments of the BRICS Member States on Cooperation in the Field of Culture signed in 2015, has over the years expanded cooperation across cultural heritage, creative industries, films, museums, archives, and digital cultural ecosystems.

BRICS Culture Track 2026 - Schedule of Meetings

2025-26 Indonesia - 10 PC

Date	Meeting / Programme	Venue
29th - 30th April, 2026	1st BRICS Culture Working Group Meeting	Virtual Mode
4th - 5th June, 2026	2nd BRICS Culture Working Group Meeting	Varanasi, India
5th - 6th August, 2026	3rd BRICS Culture Working Group Meeting	Bhopal, India
6th - 7th August, 2026	BRICS Cultural Festival	Bhopal, India
7th - 8th August, 2026	BRICS Culture Ministers' Meeting	Bhopal, India
12th - 14th October, 2026	BRICS Theatre Festival	New Delhi, India

Centre and ISRO team up for new water research initiatives

The Ministry of Jal Shakti and space agency ISRO on Monday signed a memorandum of understanding (MoU) to strengthen the use of satellite technology and space-based applications for water resource management in India. The deal was signed during a national workshop on research and development in the water sector organised by the Ministry of Jal Shakti. Under this, the department of water resources and the ISRO will work in 24 key research areas, including reservoir monitoring, water-spread assessment, river-flow analysis, and satellite-based water quality assessment. PTI

ISAD

Min of Jal Shakti

National Workshop on R&D in Water Charts Future Roadmap for Research-Led Water Security

ISRO

MAHA on Water, Bharat-WIN Startup Call and JSJB: **Catch the Rain Portal** launched; MoU signed between Ministry of Jal Shakti and ISRO

Dr. Jitendra Singh underscored the importance of a *Whole-of-Government and Whole-of-Nation* approach involving academia, industry, MSMEs and startups for realizing the vision of Viksit Bharat 2047. He highlighted the launch of **MAHA on Water (Mission for Advancement in High-Impact Areas for Water)** and the growing role of science and technology in water management, he welcomed the Ministry of Jal Shakti-ISRO collaboration and underscored the potential of advanced technologies, including space-based applications, in addressing water challenges. He also appreciated the Ministry of Jal Shakti's achievements over the past twelve years and highlighted the launch of MAHA on Water as a major step towards fostering innovation in water resources management, climate resilience and drinking water security. He also announced a joint research call by ANRF and the Ministry of Jal Shakti to accelerate research-driven and scalable solutions for the water sector. ✂

An **Open Call for Startups and MSMEs** under the **Bharat Water Innovation Network (Bharat-WIN)** was also launched to support *product and prototype development* in the water sector. The initiative aims to identify, nurture and scale innovative solutions for **water conservation, water-use efficiency, source sustainability, water quality management and climate-resilient water systems**. It seeks to strengthen innovation-to-impact pathways by facilitating collaboration among innovators, research institutions, industry partners, government programmes and end users, thereby accelerating the adoption and scaling of promising technologies. P

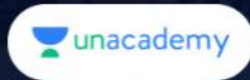
The workshop also marked the launch of **Jal Sanchay Jan Bhagidari** **Catch the Rain (JSJB:CTR) Portal**, a nationwide participatory campaign to further strengthen **community-led water conservation efforts**. Building on the success of the Jal Sanchay Jan Bhagidari initiative, the platform will facilitate citizen engagement, knowledge sharing, reporting of water conservation works and dissemination of best practices across the country. ✂

9. PIB - Project UDAYAK

- **Border Roads Organisation (BRO)** celebrated **37th Raising Day of Project UDAYAK** at Doomdooma, Assam.
- Entrusted with over **1,457 km of road network**, Project UDAYAK has been instrumental in the development and maintenance of **strategic road infrastructure** in the **easternmost regions of Arunachal Pradesh and parts of Assam**.
- Its area of responsibility covers the districts of **Anjaw, Lohit, Dibang Valley, Longding, Tirap and Changlang**.
- The Project plays a vital role in **enhancing connectivity** in remote and **strategically significant areas** along the **Line of Actual Control (LAC)** and the **Indo-Myanmar border**.
- The Project is currently undertaking **construction of roads and border fencing infrastructure**, along the **Indo-Myanmar border**, strengthening national security and improving accessibility in border regions.



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