

Headlines

International Civil Aviation Organization (ICAO) - Page No.6 , GS 2

India's critical minerals push - Page No.6 , GS 3

U.S. role in fighting climate change - Page No.6 , GS 3

Minimum support price (MSP) - Page No.12 , GS 3

National Health Mission - Page No.12 , GS 2

Text and Context - Is the government encouraging 'crosspathy'?

Join me on Telegram :- Prashant Tiwari

Username:- UPSCwithPrashant



**BY FAILING TO PREPARE, YOU
ARE PREPARING TO FAIL.**

BENJAMIN FRANKLIN

Centre announces hike in MSP for jute by ₹315 a quintal

Page No. 12, GS 3

The Hindu Bureau
NEW DELHI

The Cabinet Committee on Economic Affairs (CCEA) has fixed the minimum support price (MSP) of raw jute for the 2025-26 marketing season at ₹5,650 a quintal, an increase of ₹315 over the price in 2024-25.

Announcing the decision at a press conference here on Wednesday, Union Commerce Minister Piyush Goyal said the new MSP will ensure a return of 66.8% over the average cost of production and will benefit jute growers.

“The approved MSP of raw jute for marketing season 2025-26 is in line with the principle of fixing MSP at a level of at least 1.5 times all India weighted average cost of production as announced by the Government in the Budget 2018-19,” the Centre said in a re-

lease. “Government of India has increased MSP of raw jute from ₹2,400 per quintal in 2014-15 to ₹5,650 per quintal in 2025-26, registering an increase of ₹3,250 per quintal (2.35 times),” the press release added.

The government added that it paid ₹1,300 crore to jute growers between 2014-15 and 2024-25 for the MSP, while it was ₹441 crore during the 2004-05 to 2013-14 period.

“The livelihood of 40 lakh farm families directly or indirectly depends on jute industry. About four lakh workers get direct employment in jute mills and trade in jute. Last year, jute was procured from 1.7 lakh farmers,” the Centre said.

The Jute Corporation of India (JCI) will continue as the Union government’s nodal agency to undertake price support operations.

- **The Cabinet Committee on Economic Affairs (CCEA) has fixed the minimum support price (MSP) of raw jute for the 2025-26 marketing season at ₹5,650 a quintal, an increase of ₹315 over the price in 2024-25.**
- **Announcing the decision at a press conference here on Wednesday, Union Commerce Minister Piyush Goyal said the new MSP will ensure a return of 66.8% over the average cost of production and will benefit jute growers.**
- **The government added that it paid ₹1,300 crore to jute growers between 2014-15 and 2024-25 for the MSP, while it was ₹441 crore during the 2004-05 to 2013-14 period.**
- **“The livelihood of 40 lakh farm families directly or indirectly depends on jute industry. About four lakh workers get direct employment in jute mills and trade in jute. Last year, jute was procured from 1.7 lakh farmers,” the Centre said.**
- **The Jute Corporation of India (JCI) will continue as the Union government’s nodal agency to undertake price support operations.**

Fact

- **Minimum Support Price (MSP) is a “minimum price” for any crop that the government considers as remunerative for farmers and hence deserving of “support”.**
- **It is also the price that government agencies pay whenever they procure a particular crop. Simply, the MSP is the rate at which the government buys grains from farmers.**
- **The Commission for Agricultural Costs & Prices (CACP) in the Ministry of Agriculture recommends MSPs for 23 crops (22 mandated crops and fair and remunerative price (FRP) for sugarcane) but MSP is declared for 25 crops (toria and de-husked coconut). MSP is announced at the beginning of the sowing season.**
- **The MSP is fixed by the Central government on the recommendations of the CACP.**
- **After receiving the feedback, the Cabinet Committee on Economic Affairs (CCEA) of the Union government makes a final decision on the level of MSPs and other recommendations made by the CACP.**

Fact

- **The Food Corporation of India (FCI), the nodal agency, along with other State Agencies undertakes procurement of crops.**
- **There is neither statutory backing for these prices nor any law mandating their enforcement.**
- **Thus, the government is not legally bound to pay these even if open market rates for the said produce are ruling below their announcement floor prices.**

Commission for Agricultural Costs & Prices (CACP)

- **The CACP is an attached office of the Ministry of Agriculture and Farmers Welfare.**
- **It is a statutory body formed in 1965.**
- **It comprises a Chairman, a Member Secretary, one Member (Official) and two Members (Non-Official). The non-official members are representatives of the farming community and usually have an active association with the farming community.**
- **It recommends the MSP of the notified Kharif and Rabi crops to the Cabinet Committee on Economic Affairs (CCEA). It also motivates cultivators and farmers to adopt the latest technology.**
- **Its suggestions are not binding on the Government.**

Price Guaranteed by Government for farmers' produce.

Government sets crop MSPs at the **beginning of the sowing season** based on CACP advice.

CACP recommends:

- **MSP for 23 crops**
- But MSP is **declared for 25 crops**

These prices lack legal backing or mandatory enforcement.

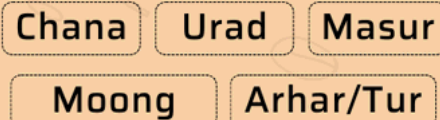
Government support to shield farmers from steep price drops.

CACP recommends MSPs for 23 commodities (17 Kharif and 6 Rabi)

CEREALS



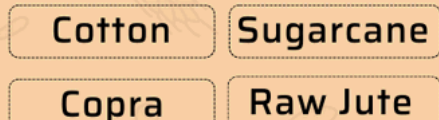
PULSES



OILSEEDS



COMMERCIAL CROPS



Procedure

CACP (Commission for Agricultural Costs and Prices)

submits its recommendations

CCEA (Cabinet Committee on Economic Affairs) (**headed by PM**)

based on CACP's recommendations

CCEA sets MSP

- The CACP does not do any field-based cost estimates itself. It merely makes projections using state-wise, crop-specific production cost estimates provided by the Directorate of Economics & Statistics in the Agriculture Ministry.
- The Commission for Agricultural Costs & Prices (CACP) details three major formulae to arrive at MSP.
- **A2:** Costs incurred by the farmer in production of a particular crop. It includes several inputs such as expenditure on seeds, fertilisers, pesticides, leased-in land, hired labour, machinery and fuel.
- **A2+FL:** Costs incurred by the farmer + the value of family labour.
- **C2:** A comprehensive cost, which is A2+FL cost + imputed rental value of owned land + interest on fixed capital, rent paid for leased-in land.
- At present, the CACP adds both A2 and FL to determine the MSP.
- The government adds 50 percent of the value obtained by adding A2 and FL only, i.e. 1.5 times A2 + FL cost to fix the MSP.

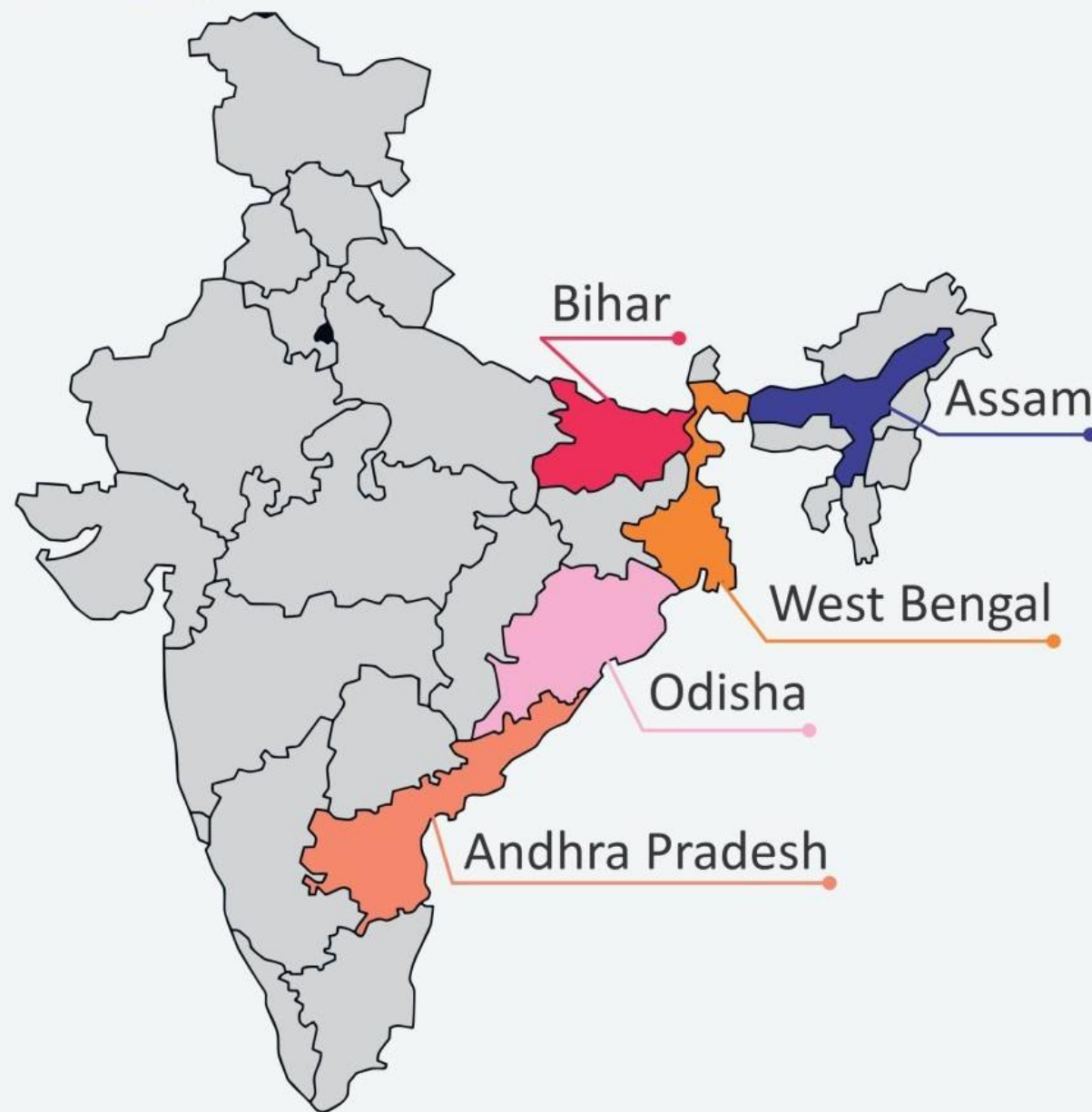
What are the Key Facts About Jute?

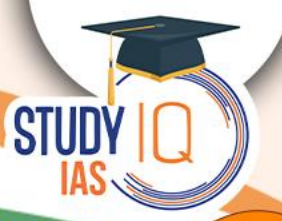
Conditions Required for Cultivation:

- **Temperature: Between 25-35°C**
- **Rainfall: Around 150-250 cm**
- **Soil Type: Well drained alluvial soil.**

Production:

- **India is the largest producer of jute followed by Bangladesh and China.**
- **However, in terms of acreage and trade, Bangladesh takes the lead accounting for three-fourths of the global jute exports in comparison to India's 7%.**
- **Jute crop cultivation is concentrated in three States, namely, West Bengal, Assam and Bihar accounting for 99% of the production.**
- **It is mainly concentrated in eastern India because of the rich alluvial soil of the Ganga-Brahmaputra delta.**





UPSC IAS

P2I Foundation PRATIGYA Batch 2026



Valid Till 27th JAN



Full Fees Refund After
Clearing UPSC CSE Prelims



Get a Chance to
Win ₹ 11,000 Monthly



2026

₹27,999



2027

₹32,999



USE CODE

PRTLIVE!



Batch Starting on 27th January 2025 | 8:00 AM

Join Me:

Instagram:- tiwariprashant26

Twitter:- Prashantt26

Telegram:- UPSCwithPrashant
(Prashant Tiwari)



Prashant Tiwari

93,436 subscribers



t.me/UPSCwithPrashant

Link

1. The Hindu Playlist -

[https://youtube.com/playlist?](https://youtube.com/playlist?list=PLpuxPG4TUOR4VHsceopVQtj73aJ0idtpl)

[list=PLpuxPG4TUOR4VHsceopVQtj73aJ0idtpl](https://youtube.com/playlist?list=PLpuxPG4TUOR4VHsceopVQtj73aJ0idtpl)

2. NCERT Playlist:-

[https://youtube.com/playlist?](https://youtube.com/playlist?list=PLpuxPG4TUOR5Q3pN6ivhc77yZ6HY9v7Ad)

[list=PLpuxPG4TUOR5Q3pN6ivhc77yZ6HY9v7Ad](https://youtube.com/playlist?list=PLpuxPG4TUOR5Q3pN6ivhc77yZ6HY9v7Ad)

3. PIB Weekly:- [https://youtube.com/playlist?](https://youtube.com/playlist?list=PLpuxPG4TUOR59OtRNhFu)

[list=PLpuxPG4TUOR59OtRNhFu](https://youtube.com/playlist?list=PLpuxPG4TUOR59OtRNhFu)

Description



tiwariprashant26

Edit profile

View archive

Ad tools



310 posts

30.1K followers

357 following

Prashant tiwari

Education

Educator at StudyIQ IAS

न कृष्ण की तरह सारथी हूँ

न अर्जुन की तरह महारथी हूँ

मात्र मैं हूँ

इस ज्ञेय-अज्ञेय के मध्य स्थित

youtube.com/playlist?list=PLpuxPG4TUOR4VHsceopVQtj73aJ0idtpl

46.8K accounts reached in the last 30 days. [View insights](#)



Newspaper



Burning Issues



Practice



Motivation



Guidance



Reviews



PYQ

National Health Mission has curbed several public health concerns, says Centre's report

Page No. 12, GS 2

Bindu Shajan Perappadan
NEW DELHI

The National Health Mission (NHM) has significantly contributed to improving India's public health, including lowering of the maternal mortality ratio, incidence of tuberculosis (TB), and sickle cell anaemia.

It has also contributed to expanding human resources in the field while fostering an integrated response to health emergencies, the Union government said on Wednesday in its assessment report (2021-24) presented to the Union Cabinet.

Listing out key achievements of the NHM in the past three years, the Centre noted that there had been a significant increase in human resources within the healthcare sec-

With NHM, maternal mortality ratio has declined by 83% since 1990, which is higher than the global decline of 45%

tor. "In FY 2021-22, NHM facilitated the engagement of 2.69 lakh additional healthcare workers, including general duty medical officers, specialists, staff nurses, AYUSH doctors, allied healthcare workers, and public health managers. Additionally, 90,740 community health officers (CHOs) were engaged. This number grew in subsequent years, with 4.21 lakh additional healthcare professionals engaged in FY 2022-23, including 1.29 lakh CHOs, and 5.23 lakh workers engaged in FY 2023-24, which includ-

ed 1.38 lakh CHOs," the report stated.

It further noted that under NHM, the Maternal Mortality Ratio (MMR) has declined by 83% since 1990, which is higher than the global decline of 45%. Infant Mortality Rate (IMR) has fallen from 39 per 1,000 live births in 2014 to 28 in 2020.

Moreover, the Total Fertility Rate (TFR) decreased from 2.3 in 2015 to 2.0 in 2020, according to the National Family Health Survey (NFHS-5). These improvements indicate that India is on track to meet its U.N. Sustainable Development Goals (SDG) targets for maternal, child, and infant mortality well ahead of 2030. The NHM has also been instrumental in the elimination and control of various diseases, including the incidence of TB.

Content.

- **The National Health Mission (NHM) has significantly contributed to improving India's public health, including lowering of the maternal mortality ratio, incidence of tuberculosis (TB), and sickle cell anaemia.**
- **It has also contributed to expanding human resources in the field while fostering an integrated response to health emergencies, the Union government said on Wednesday in its assessment report (2021-24) presented to the Union Cabinet.**
- **It further noted that under NHM, the Maternal Mortality Ratio (MMR) has declined by 83% since 1990, which is higher than the global decline of 45%. Infant Mortality Rate (IMR) has fallen from 39 per 1,000 live births in 2014 to 28 in 2020.**
- **Moreover, the Total Fertility Rate (TFR) decreased from 2.3 in 2015 to 2.0 in 2020, according to the National Family Health Survey (NFHS-5).**

Content.

- **The maternal mortality rate (MMR) is the number of maternal deaths per 100,000 live births. It's a key indicator of the risk of pregnancy and death for women.**
- **NHM was launched by the government of India in 2013 subsuming the National Rural Health Mission (Launched in 2005) and the National Urban Health Mission (Launched in 2013).**
- **The main programmatic components include Health System Strengthening in rural and urban areas for - Reproductive-Maternal- Neonatal-Child and Adolescent Health (RMNCH+A), and Communicable and Non-Communicable Diseases.**
- **The NHM envisages achievement of universal access to equitable, affordable & quality health care services that are accountable and responsive to people's needs.**

GOALS

- Reduce MMR to 1/1000 live births
- Reduce IMR to 25/1000 live births
- Reduce TFR to 2.1
- Prevention and reduction of anemia in women aged 15-49 years
- Prevent and reduce mortality and morbidity from communicable, non-communicable, injuries and emergency diseases
- Reduce household out-of-pocket expenditure on total health care expenditure
- Reduce annual incidence and mortality from Tuberculosis by half
- Reduce prevalence of Leprosy to <1/10000 population and incidence to zero in all districts
- Annual Malaria incidence to be <1/1000
- Less than 1percent microfilaria prevalence in all districts
- Kala-Azar Elimination by 2015, <1case per 10000 population in all blocks

Content.

- **Kala-azar, also known as visceral leishmaniasis (VL), is a severe form of leishmaniasis caused by the protozoan parasite *Leishmania donovani*.**
- **It is transmitted to humans through the bite of an infected female sandfly, primarily *Phlebotomus argentipes* in India.**
- **The disease affects some of the world's poorest people and is associated with malnutrition, population displacement, poor housing, a weak immune system and lack of financial resources.**
- **People with HIV and other conditions that weaken their immune system, are more likely to get sick from a *Leishmania* infection.**

An exit of bluster

The rest of the world must reassess the U.S.'s role in fighting climate change

President Donald Trump has fired his ho-witzers at multilateralism by signing into decree the United States' withdrawal from the 2015 Paris Agreement. This sets records that are in a class of their own. The U.S. is the only country to have withdrawn thrice from a climate agreement – beginning with George W. Bush's withdrawal, in 2001, from the Kyoto Protocol. Mr. Trump, of course, sets a new low by being the only President to withdraw from a climate agreement twice. In the run-up to the decree, there is a pall of gloom in the climate world over what the U.S.'s latest exit might mean, particularly when the globe has finished its first full calendar year above the 1.5° Celsius mark.

The U.S. is the second largest emitter of greenhouse gases. By virtue of being the most powerful economy, it has arrogated to itself the mantle of 'global leadership' in addressing climate change. But now that the leader has had the spottiest track record of keeping to the terms of a significant agreement – one, whose rule book the U.S. played a major role in compiling – perhaps it is time for the rest of the world to reassess America's role in addressing climate change. Under both Republican and Democratic governments, U.S. domestic policy on greenhouse gas emissions has been subservient to business interests. Oil and gas production increased under the Biden administration. The U.S. remains the world's largest crude oil producer, achieving record production in 2023. The country is also the world's largest producer of gas and, in 2022, became the world's largest exporter for liquified natural gas (LNG). Mr. Trump has only committed to add on to this already substantial base. The U.S. is critically short of achieving its target of greenhouse gas emissions. As of 2022, the U.S. has achieved only about one-third of its 2030 emissions reduction target. In the last weeks of his Presidency, Mr. Biden increased the U.S.'s emission-reduction commitments to 61%-66% of 2005 levels by 2035. This too, calculations suggest, will be insufficient to meet a 1.5° C target. Private capital propping up renewable energy has grown exponentially since Mr. Bush, and is now too substantial for Mr. Trump and his financial backers to ignore. While it will take a year for the exit to be formalised, it is likely that the U.S.'s behind-the-scenes engagement – especially at the next climate meet (COP 30) in Brazil in November 2025 – will continue. The politics of Mr. Trump suggests that he is not averse to running with the hare and hunting with the hounds.

Page No. 6, GS 3

Content.

- **President Donald Trump has fired his howitzers at multilateralism by signing into decree the United States' withdrawal from the 2015 Paris Agreement. This sets records that are in a class of their own.**
- **The U.S. is the only country to have withdrawn thrice from a climate agreement — beginning with George W. Bush's withdrawal, in 2001, from the Kyoto Protocol.**
- **Mr. Trump, of course, sets a new low by being the only President to withdraw from a climate agreement twice.**
- **In the run-up to the decree, there is a pall of gloom in the climate world over what the U.S.'s latest exit might mean, particularly when the globe has finished its first full calendar year above the 1.5° Celsius mark.**

- **The U.S. is the second largest emitter of greenhouse gases. By virtue of being the most powerful economy, it has arrogated to itself the mantle of 'global leadership' in addressing climate change.**
- **The top three GHG emitters — China, the United States and India — contribute 42.6% total emissions, while the bottom 100 countries only account for only 2.9%.**
- **Under both Republican and Democratic governments, U.S. domestic policy on greenhouse gas emissions has been subservient to business interests. Oil and gas production increased under the Biden administration.**
- **The U.S. remains the world's largest crude oil producer, achieving record production in 2023.**
- **The country is also the world's largest producer of gas and, in 2022, became the world's largest exporter for liquified natural gas (LNG). Mr. Trump has only committed to add on to this already substantial base.**

Content.

- **The U.S. is critically short of achieving its target of greenhouse gas emissions.**
- **As of 2022, the U.S. has achieved only about one-third of its 2030 emissions reduction target. In the last weeks of his Presidency, Mr. Biden increased the U.S.'s emission-reduction commitments to 61%-66% of 2005 levels by 2035.**
- **While it will take a year for the exit to be formalised, it is likely that the U.S.'s behind-the-scenes engagement — especially at the next climate meet (COP 30) in Brazil in November 2025 — will continue.**

China's moves must recast India's critical minerals push

Page No. 6, GS 3

In January 2, 2025, China's Ministry of Commerce (MOFCOM) expanded its export control list by including 28 entities from the United States, effectively restricting their access to a swath of items classified under dual-use export controls. At the core of these restrictions lies minerals and rare and refined materials that are vital for high-technology applications such as in aerospace, semiconductors, batteries, and advanced electronics. Beijing's list encompasses tungsten, gallium, magnesium, beryllium, hafnium, lithium-6 (isotope), and others – minerals with uses ranging from chip production to specialty alloys.

This is not the first time that China has weaponised the exports of its critical minerals. And it is an approach that is strategic and calculated. Beijing primarily targets minerals that are deemed to be critical by western nations and their allies, especially those essential for semiconductors, batteries, and high-tech manufacturing. However, China carefully balances these decisions against two constraining factors: it avoids controlling minerals which are heavily dependent on western raw material imports. And it refrains from actions that could disrupt its domestic industrial enterprises or export-dependent sectors. This strategic calculus was evident in China's rare earth minerals embargo against Japan in 2010, its recent restrictions on antimony, gallium, and germanium exports, and its ban, in December 2023, on rare earth extraction and processing technologies.

The situation in India

Meanwhile, policymakers in the United States and elsewhere are becoming increasingly concerned. These developments underscore a larger trend: the competition for critical minerals has become a fulcrum of international economic diplomacy. For nations such as India, these events are also a wake-up call – to improve domestic mineral exploration and production capacity.

India's push for critical minerals development



Rakshith Shetty

is a Research Analyst at the Takshashila Institution, Bengaluru



Pranay Kotasthane

is the Deputy Director at the Takshashila Institution, Bengaluru

India's critical minerals development plans face challenges; a way out may be to adopt the semiconductor fabrication model

has faced stubborn challenges. In 2023, lithium deposits that were found in Jammu and Kashmir's Reasi district made headlines, hinting at a game-changer moment for India's energy transition. However, a little over a year later, the story remains lacklustre: no company has shown interest in bidding for these resources, and the block remains in limbo. Unfortunately, this is not an isolated incident. Government data show that only 48% (24 out of 49) of the mineral blocks available for auction in recent years have been auctioned.

This lack of market enthusiasm cannot be pinned entirely on government negligence. Over the last three years, the Union government has introduced measures to spur activity in critical minerals. The Ministry of Mines identified 30 critical minerals that are deemed essential for national security. And before that, the Union government set up a designated body, Khanij Bidesh India Ltd. (KABIL), which has been tasked with obtaining overseas investments in critical minerals such as lithium and cobalt. Parliament passed the Mines and Minerals (Development and Regulation) Amendment Act, 2023, lifting restrictive classifications on some rare earth elements that used to be considered 'atomic minerals'. These reforms theoretically opened the door for greater private-sector investment and technology sharing.

Reforms and results

A key highlight of the 2023 amendments is the introduction of an 'exploration license', devised to attract specialised resource exploration agencies, including foreign companies, to survey potentially rich but geologically challenging deposits. Instead of having to commit to a full-scale mining operation that can take over a decade or more to turn profitable, these exploratory firms can now participate in reconnaissance and prospecting alone. The law also promises to reimburse 50% of the exploration expenditure once mining begins, aiming to de-risk early-stage operations.

Despite these promising reforms, the results have been tepid. Only a handful of exploration

licences for minerals such as lithium, rare earth elements, and graphite have been cleared, and those mostly went to Indian public sector firms. Foreign participation is sparse, and further downstream, mining license auctions for critical minerals have largely stalled.

One explanation is that India's resource classification system is outdated, leaving miners unsure about the commercial viability of mineral blocks. Exploration levels – often categorised under international norms as G1, G2, G3, or G4 – require progressively detailed geological data on ore grade and quantity. Many auctioned blocks in India have yet to reach advanced exploration status, making them riskier to prospective bidders. That said, a more puzzling factor is the low demand for exploration licences themselves – an option that should, in principle, help de-risk investments but evidently has not had the intended effect.

Fiscal incentives may be essential

This brings us to the essential role of high-quality data. Exploration is at the heart of mitigating 'information asymmetry', where potential buyers (mining companies) and the seller (government) do not share a clear view of the resource's true value. Without robust geological surveys, many bidders discount their offers or abstain entirely. The result is suboptimal auctions, with some potentially valuable blocks simply overlooked.

A possible remedy is to offer larger upfront fiscal incentives during the exploration phase. In other words, the solution might be to approach critical minerals extraction as a semiconductor fabrication project. In chip manufacturing – another sector with enormous upfront costs and slow returns – India has taken an aggressive approach, pledging direct capital support early in the construction phase. A similar model could work for critical minerals, offsetting immediate exploration costs instead of reimbursing them only after production begins. Upfront capital support for exploration would resolve a market failure and help unlock value many times over in downstream mining, exploration, sales, and exports.

Content.

- **On January 2, 2025, China's Ministry of Commerce (MOFCOM) expanded its export control list by including 28 entities from the United States, effectively restricting their access to a swath of items classified under dual-use export controls.**
- **At the core of these restrictions lies minerals and rare and refined materials that are vital for high-technology applications such as in aerospace, semiconductors, batteries, and advanced electronics.**
- **Beijing's list encompasses tungsten, gallium, magnesium, beryllium, hafnium, lithium-6 (isotope), and others — minerals with uses ranging from chip production to speciality alloys.**
- **This is not the first time that China has weaponised the exports of its critical minerals. And it is an approach that is strategic and calculated.**

Content.

- **Beijing primarily targets minerals that are deemed to be critical by western nations and their allies, especially those essential for semiconductors, batteries, and high-tech manufacturing.**
- **However, China carefully balances these decisions against two constraining factors: it avoids controlling minerals which are heavily dependent on western raw material imports.**
- **This strategic calculus was evident in China's rare earth minerals embargo against Japan in 2010, its recent restrictions on antimony, gallium, and germanium exports, and its ban, in December 2023, on rare earth extraction and processing technologies.**
- **For nations such as India, these events are also a wake-up call — to improve domestic mineral exploration and production capacity.**

- **India's push for critical minerals development has faced stubborn challenges. In 2023, lithium deposits that were found in Jammu and Kashmir's Reasi district made headlines, hinting at a game-changer moment for India's energy transition.**
- **However, a little over a year later, the story remains lacklustre: no company has shown interest in bidding for these resources, and the block remains in limbo.**
- **Unfortunately, this is not an isolated incident. Government data show that only 48% (24 out of 49) of the mineral blocks available for auction in recent years have been auctioned.**
- **This lack of market enthusiasm cannot be pinned entirely on government negligence. Over the last three years, the Union government has introduced measures to spur activity in critical minerals.**
- **The Ministry of Mines identified 30 critical minerals that are deemed essential for national security.**

Content.

- **Union government set up a designated body, Khanij Bidesh India Ltd. (KABIL), which has been tasked with obtaining overseas investments in critical minerals such as lithium and cobalt.**
- **Parliament passed the Mines and Minerals (Development and Regulation) Amendment Act, 2023, lifting restrictive classifications on some rare earth elements that used to be considered 'atomic minerals'.**
- **Exploration is at the heart of mitigating 'information asymmetry', where potential buyers (mining companies) and the seller (government) do not share a clear view of the resource's true value.**
- **Without robust geological surveys, many bidders discount their offers or abstain entirely.**

Content.

- **Khanij Bidesh India Ltd (KABIL), a joint venture of three public sector undertakings, is working to acquire a lithium block in Australia.**
- **KABIL is a joint venture of National Aluminium Company Ltd (Nalco), Hindustan Copper Ltd (HCL), and Mineral Exploration and Consultancy Ltd (MECL) the Central Public Sector Enterprises (CPSEs) under the Ministry of Mines.**
- **It aims to identify, acquire, develop, process, and commercialise strategic minerals from overseas locations for supply in India, with a focus on battery minerals like Lithium and Cobalt.**

1. Antimony	15. Nickel	iv. Neodymium	20. Rhenium
2. Beryllium	16. PGE	v. Promethium	21. Selenium
3. Bismuth	i. Platinum	vi. Samarium	22. Silicon
4. Cadmium	ii. Palladium	vii. Europium	23. Strontium
5. Cobalt	iii. Rhodium	viii. Gadolinium	24. Tantalum
6. Copper	iv. Ruthenium	ix. Terbium	25. Tellurium
7. Gallium	v. Iridium	x. Dysprosium	26. Tin
8. Germanium	vi. Osmium	xi. Holmium	27. Titanium
9. Graphite	17. Phosphorous	xii. Erbium	28. Tungsten
10. Hafnium	18. Potash	xiii. Thulium	29. Vanadium
11. Indium	19. REE	xiv. Ytterbium	30. Zirconium
12. Lithium	i. Lanthanum	xv. Lutetium	
13. Molybdenum	ii. Cerium	xvi. Scandium	
14. Niobium	iii. Praseodymium	xvii. Yttrium	

It's Russian roulette in the skies

Page No. 6, GS 2

Over 70 years ago, Ian Fleming created the fictional character of a secret service agent called James Bond, code named 007, who had the licence to kill. On September 1, 1983, a Korean Airlines jet, flight 007, on a scheduled flight from New York to Seoul via Anchorage, was shot down by a Russian Air Force Sukhoi fighter plane when the Korean flight had deviated from its flight path due to a navigational error. All 246 passengers and 23 crew were killed. One of the passengers was the daughter of Hans Ephraimson-Abt, who began an organisation to aid the victims of air accidents. His initiative resulted in a big push at the International Civil Aviation Organization (ICAO) to publish rules regarding conflict risk. But this was shot down by Russia and its allies in ICAO.

Cases of misidentification

On July 3, 1988, an Iran Air plane, flight 655, was shot down by a United States Navy warship, USS *Vincennes*, over the Strait of Hormuz. All 290 passengers were killed when the ship's missile brought down the plane which was misidentified to be a fighter plane. During the Iran-Iraq war (1980-88), U.S. patrolling required civilian aircraft to transmit the Identification Friend or Foe mode code. Apparently, the warship crew identified the Iranian aircraft to be a fighter and orders were issued to shoot it down.

On November 22, 2003, a DHL Cargo plane took off from Baghdad for Bahrain. As the flight was making a rapid climb out, a surface to air missile launched by terrorists struck the left wing between the engine and the wing tip. The crew lost all hydraulics and because the fuel tank was full, there were no fuel vapours to explode in the exposed fuel tank. The crew controlled the flight using only differential engine thrust and managed to carry out a safe landing, displaying exceptional skill. This writer had the privilege of attending a special presentation by the crew at the Flight Safety Foundation IASS 2004 seminar at Shanghai, China.

On February 27, 2019, just after Balakot, when fighter planes of the Indian Air Force (IAF) and the Pakistan Air Force were engaged in a dogfight, an IAF Mi-17 helicopter was shot down by a surface-to-air missile of the IAF's air defence system. Six personnel lost their lives in what was a serious error. Here again, the helicopter was wrongly identified as a foe.



Captain A. (Mohan) Ranganathan

is a former airline instructor pilot and aviation safety adviser. He is also a former member of the Civil Aviation Safety Advisory Council (CASAC), India

With military conflicts and incidents of state players posing threats to civil aviation rising, the issue of training proficiency and skills assumes importance

On July 17, 2014, a Malaysia Airlines flight, MH17, from Amsterdam to Kuala Lumpur with 283 passengers and 15 crew, was shot down by Russian-backed forces with a surface-to-air missile while flying over eastern Ukraine.

All these examples highlight the issue of misidentification.

Post September 11, 2001, there are specific procedures to be followed in the event of track deviation due to weather, or a failure of navigation signals. Specific radio procedures are implemented for crew to comply with, else air force fighter jets may shoot down a civilian aircraft if perceived to be flying in a suspicious manner. On February 16, 2017, an Indian airline flight, Jet Airways flight 9W 118, with 330 passengers and 15 crew members, from Mumbai to London, was cruising at 36,000 feet. It flew over a few flight information regions without maintaining radio contact with the air traffic control of the region. The plane had not deviated from its assigned track. When it entered German airspace north of Cologne, the German Air Force deployed two of its Eurofighter Typhoons to intercept the Indian plane. Had the Jet Airways crew not responded to the Germans on an emergency frequency, they could have been shot down.

India's safety regulator, the Directorate General of Civil Aviation (DGCA), did a cover up terming it as a malfunction of the aircraft's communication system. If it was really a communication failure, the aircraft crew should have been using the necessary transponder code and ground stations would have known that it was an aircraft facing communication failure. Fighter jets would not have been deployed to intercept it.

Conflict zones, their dangers

The case of an Azerbaijani airliner, while on a flight from Baku in Azerbaijan to Grozny, in Russia, on December 25, 2024, but which crashed near the Kazakhstan city of Aktau after being diverted, has been the result of another event where a Russian anti-aircraft defence system may have caused the loss of lives. Of the 67 passengers on board, there were some survivors. For a state to get away with it by just saying 'sorry' does not bring back the precious lives lost. The aircraft had veered from its scheduled route due to fog. There is also the issue of GPS spoofing and false signals

or a loss of signals that affect navigation.

More than 500 people have lost their lives due to civil airlines being shot down. With growing wars and conflicts, flying over or near conflict zones is becoming dangerous, especially when there are countries which do not respect international borders and there are rogue elements who cause trouble by interfering with GPS signals.

The Indian regulator's silence

This brings the focus on a serious issue. Do airlines in India have comprehensive training in place for pilots to recognise jammed signals and do the airlines have standard operating procedures in place for taking over the navigation with alternate methods? There are reports of GPS errors or failures in the airspace over Pakistan, Afghanistan and Myanmar. With a rapid expansion of flights and with large numbers of aircraft being inducted, do airlines in India have enough experienced pilots? For example, Air India operates many of its non-stop flights to the west coast of the United States on routes that are avoided by American carriers. There are also reports of some leased aircraft with Air India not being equipped for extended flights over mountainous terrain. We hear nothing from the DGCA on what preventive measures it is taking in these cases.

We have had three passenger aircraft shot down by the Russians or Russian-linked agents. We have had the U.S. Navy shooting down a passenger airliner. We have had a cargo aircraft shot by a terrorist group with missiles supplied by either Russia or the U.S. as conflicts in West Asia have involved one or the other super power aiding sides in the conflicts. The large-scale use of drones and defence forces using missiles to shoot down flights make the skies really unsafe for passenger aircraft while flying over conflict regions. There is another danger. Skill levels have dropped as there is now rapid training which has resulted in degraded monitoring to assess pilot proficiency. The world has to wake up and take cognisance of this new danger. Indian aviation may be expanding rapidly but, at the same time, there is no urgency or compulsion to ensure the quality of pilots' flying skills. As James Reason's Swiss cheese theory explains, the holes in the cheese are lining up.

Do we act now or let another disaster pass?

- On September 1, 1983, a Korean Airlines jet, flight 007, on a scheduled flight from New York to Seoul via Anchorage, was shot down by a Russian Air Force Sukhoi fighter plane when the Korean flight had deviated from its flight path due to a navigational error.

International Civil Aviation Organization (ICAO)

- ICAO is an intergovernmental specialized agency associated with the United Nations (UN).
- It was established in 1947 by the Convention on International Civil Aviation (1944) known as Chicago Convention.
- Headquarters: Montreal, Canada
- ICAO is dedicated to developing safe and efficient international air transport for peaceful purposes and ensuring a reasonable opportunity for every state to operate international airlines.
- It sets standards and regulations necessary for aviation safety, security and facilitation, efficiency, and economic development of air transport as well as to improve the environmental performance of aviation.
- It also serves as a clearinghouse for cooperation and discussion on civil aviation issues among its 193 member states.

Director General of Civil Aviation (DGCA)

- **It is the regulatory body in the field of civil aviation primarily dealing with safety issues.**
- **It is an attached office of the Ministry of Civil Aviation.**
- **It is responsible for regulation of air transport services to/from/within India and for enforcement of civil air regulations, air safety and airworthiness standards.**
- **It also coordinates all regulatory functions with the International Civil Aviation Organisation.**
- **Headquarters: New Delhi**

Functions and Responsibilities of the DGCA:

- **One of the main functions of the DGCA is to ensure the safety of passengers and crew members on all flights operating in India.**
- **The organization conducts regular safety inspections of all airlines and aircraft to meet the required safety standards.**

Is the government encouraging ‘crosspathy’?

Why did the Maharashtra Food and Drugs Administration issue a directive allowing homeopathic practitioners to prescribe allopathic medicines?

Zubeda Hamid

The story so far:

The Maharashtra Food and Drugs Administration has, in a recent directive, allowed homeopathic practitioners, who have completed a certificate course in modern pharmacology, to prescribe allopathic medications.

Why is it being challenged?

In 2017, the Maharashtra Medical Education and Drug Department had issued a notification allowing homeopathic practitioners to practise modern medicine. As per this notification, doctors who had obtained the Licentiate of the Court of Examiners of Homeopathy degree from 1951-1982 (the degree was abolished in 1982), and were registered with the Maharashtra Medical Council, were allowed to practise

modern medicine. This directive was challenged in the Bombay High Court by the Indian Medical Association (IMA). The High Court issued a stay, with the Bench questioning the risk that could be posed to patients if these doctors were allowed to practise allopathy.

IMA Maharashtra president Santosh Kadam said it was unclear why the Maharashtra FDA had now issued this directive. He said that even the central body for homeopathy had no provision to allow its practitioners to practise another stream of medicine and that ‘crosspathy’ was banned by the Supreme Court. Following the Bombay High Court stay, homeopathic practitioners were not allowed to prescribe allopathic medication, until the final decision of the court came in, he said.

Former secretary of the IMA, Maharashtra, Parthiv Sanghvi, pointed out that the issue has been portrayed as

the Maharashtra government allowing homeopathic practitioners to practise modern medicine – which is not the case, as this has already been stayed by the High Court. “This was a direction to chemists to entertain allopathic prescriptions of homeopathic practitioners. But who has given the FDA the authority to issue such a directive, in light of the fact that court has stayed the order allowing homeopathic practitioners to practise modern medicine,” he asked.

What is SC’s stance on ‘crosspathy’?

In 1996, in *Poonam Verma versus Ashwin Patel and Others*, which involved a homeopath treating a patient with allopathic medications and the patient subsequently dying, the Supreme Court held the homeopath liable for negligence as he had prescribed medications that he was not qualified to. A 2015 research paper by Suresh Bada Math et al states:

“Across judgments, the judiciary has held that cross-system practice is a form of medical negligence; however, it is permitted only in those states where the concerned governments have authorised it by a general or special order.”

Is there a shortage of doctors?

The Central government has been promoting AYUSH medicine for some years now, with a push being given to integrative/integrated medicine. The rationale, in general, has been that India has a shortage of doctors, particularly in rural areas, and that the AYUSH cadre of practitioners can help fill in these gaps.

As per a Parliament statement in February 2024, there are 13,08,009 allopathic doctors registered with the State medical councils and the National Medical Commission as on June 2022, and 5.65 lakh AYUSH doctors. The shortage of specialists is dire – the Health Dynamics of India 2022-23 report reveals a nearly 80% shortage of specialist doctors in community health centres across rural India. Public health specialist Soham Bhaduri pointed out that while there is evidence that mid-level providers can provide care of comparable quality to that of medical doctors, their orderly integration into the system is crucial. “Allowing just any cadre of alternative medical practitioners to assume roles and functions that are meant for medical doctors is a recipe for anarchy.”

THE GIST

▼
In 2017, the Maharashtra Medical Education and Drug Department had issued a notification allowing homeopathic practitioners to practise modern medicine. This directive was challenged in the Bombay High Court by the Indian Medical Association.

▼
The Central government has been promoting AYUSH medicine for some years now, with a push being given to integrative/integrated medicine.

▼
The rationale, in general, has been that India has a shortage of doctors, particularly in rural areas, and that the AYUSH cadre of practitioners can help fill in these gaps.

- **The Maharashtra Food and Drugs Administration has, in a recent directive, allowed homeopathic practitioners, who have completed a certificate course in modern pharmacology, to prescribe allopathic medications.**
- **In 2017, the Maharashtra Medical Education and Drug Department had issued a notification allowing homeopathic practitioners to practise modern medicine.**
- **As per this notification, doctors who had obtained the Licentiate of the Court of Examiners of Homeopathy degree from 1951-1982 (the degree was abolished in 1982), and were registered with the Maharashtra Medical Council, were allowed to practise modern medicine.**
- **This directive was challenged in the Bombay High Court by the Indian Medical Association (IMA).**
- **The High Court issued a stay, with the Bench questioning the risk that could be posed to patients if these doctors were allowed to practise allopathy.**

Fact

- In 1996, in **Poonam Verma versus Ashwin Patel and Others**, which involved a homeopath treating a patient with allopathic medications and the patient subsequently dying, the Supreme Court held the homeopath liable for negligence as he had prescribed medications that he was not qualified to.
- The Central government has been promoting AYUSH medicine for some years now, with a push being given to integrative/integrated medicine. The rationale, in general, has been that India has a shortage of doctors, particularly in rural areas, and that the AYUSH cadre of practitioners can help fill in these gaps.
- The shortage of specialists is dire — the Health Dynamics of India 2022-23 report reveals a nearly 80% shortage of specialist doctors in community health centres across rural India.





UPSC IAS

P2I Foundation PRATIGYA Batch 2026



Valid Till 27th JAN



Full Fees Refund After
Clearing UPSC CSE Prelims



Get a Chance to
Win ₹ 11,000 Monthly



2026

₹27,999



2027

₹32,999



USE CODE

PRTLIVE!



Batch Starting on 27th January 2025 | 8:00 AM

Join Me:

Instagram:- tiwariprashant26

Twitter:- Prashantt26

Telegram:- UPSCwithPrashant
(Prashant Tiwari)



Prashant Tiwari

93,436 subscribers



t.me/UPSCwithPrashant

Link

1. The Hindu Playlist -

[https://youtube.com/playlist?](https://youtube.com/playlist?list=PLpuxPG4TUOR4VHsceopVQtj73aJ0idtpl)

[list=PLpuxPG4TUOR4VHsceopVQtj73aJ0idtpl](https://youtube.com/playlist?list=PLpuxPG4TUOR4VHsceopVQtj73aJ0idtpl)

2. NCERT Playlist:-

[https://youtube.com/playlist?](https://youtube.com/playlist?list=PLpuxPG4TUOR5Q3pN6ivhc77yZ6HY9v7Ad)

[list=PLpuxPG4TUOR5Q3pN6ivhc77yZ6HY9v7Ad](https://youtube.com/playlist?list=PLpuxPG4TUOR5Q3pN6ivhc77yZ6HY9v7Ad)

3. PIB Weekly:- [https://youtube.com/playlist?](https://youtube.com/playlist?list=PLpuxPG4TUOR59OtRNhFu)

[list=PLpuxPG4TUOR59OtRNhFu](https://youtube.com/playlist?list=PLpuxPG4TUOR59OtRNhFu)

Description

tiwariprashant26

Edit profile

View archive

Ad tools



310 posts

30.1K followers

357 following

Prashant tiwari

Education

Educator at StudyIQ IAS

न कृष्ण की तरह सारथी हूँ
न अर्जुन की तरह महारथी हूँ

मात्र मैं हूँ

इस ज्ञेय-अज्ञेय के मध्य स्थित

youtube.com/playlist?list=PLpuxPG4TUOR4VHsceopVQtj73aJ0idtpl

46.8K accounts reached in the last 30 days. [View insights](#)



Newspaper



Burning Issues



Practice



Motivation



Guidance



Reviews



PYQ



Thank You!