BYJU'S EXAM PREP | IAS

THE HINDU ANALYSIS

www.thehindu.com

INDIA'S NATIONAL NEWSPAPER SINCE 1878

12th JULY, 2023

Topics to be covered:

Detailed Analysis:

1. Chandrayaan 3 - Pg 12 & 18
2. North India Floods & Landslides - Pg 1, 8 & 12
3. The Forest (Conservation) Amendment Bill, 2023 - Pg 6 & 10

Topics to be covered:

Prelims Bytes:

4. Multidimensional Poverty Index of UNDP - Pg 12
5. SCALP or Storm Shadow missiles - Pg 13

1. Page 12 & 18 – GS III (S&T)

Chandrayaan-3 will aim for the moon but look beyond to the future

ISRO is planning Chandrayaan 3 to demonstrate end-to-end capability for safe landing and roving on the lunar surface. Launch is scheduled for July 14 at 2.35 pm. It will be on board the Launch Vehicle Mark III. The vehicle will carry a lander attached to a propulsion module. The latter will carry the former to a circular orbit around the Moon

S. Sivakumar
Vikash Pandey

Who doesn't enjoy the sight of the Moon? Whether its phase is gibbous, crescent, or complete, the Moon mesmerises children, poets, and anyone who identifies with nature for its serene beauty, its sense of calm, and the sensations it kindles.

Scientists are interested in the moon to understand its origin and characteristics, and, if possible, to explore the possibility of inhabiting it - and these studies require going to the Moon. Not many countries have undertaken such studies, but India is well-positioned with its industrial and technological support base and trained human resources to venture into studying the moon at close quarters. This feat is yet another feather in the cap of the Indian Space Research Organisation (ISRO). No wonder it attracts talented youth from the best institutions in the country.

Chandrayaan-1

ISRO's first attempt was the Chandrayaan 1 ("Lunar Vehicle 1") mission, which began in October 2008 with a launch of the very successful Polar Satellite Launch Vehicle (PSLV). The rocket carried a lunar orbiter meant to go around the moon, like a satellite and an impact probe. The orbiter relieved the impact probe to hit the surface of the south polar region of the moon, to generate data relevant to designing a lunar rover that would be a part of the payload in a subsequent mission.

While descending to the moon, the impactor probe collected information on the chemical composition of the lunar atmosphere. Notably, this mission established the availability of water molecules on the moon, a discovery that may be crucial for future crewed missions. The probe also carved the national flag of India on the Moon, announcing the country's arrival.

The mission did not last two years as planned, possibly due to overheating issues in the orbiter, but it achieved most of its scientific objectives. In a testament to its success, it received many accolades from the international community.

Chandrayaan 2

The next such mission was Chandrayaan 2 in July 2019, which was launched by a Geosynchronous Satellite Launch Vehicle (GSLV). Its payload included a moon lander that carried a rover to release on the moon. The lander, unfortunately, crashed on the lunar surface due to a software glitch, and the rover did not detach from the lander, so further studies

The Chandrayaan-3 propulsion module (top) attached to the lander (bottom) containing the rover, while undergoing a test. ISRO

A Chennai-based amateur space enthusiast named Shanmuga Subramanian, skilled in image analysis, identified the location of the lander's debris, and NASA later confirmed it. Participation by citizens in big science projects is a welcome trend and researchers should strive to create such opportunities.

Currently, ISRO is planning Chandrayaan-3 to demonstrate end-to-end capability for safe landing and roving on the lunar surface. The launch is scheduled for July 14 at 2.35 pm. The mission will be launched on board the Launch Vehicle Mark III (LVM 3, a.k.a. GSLV Mk III). The vehicle will carry a lander attached to a propulsion module. The latter will carry the former to a circular orbit around the moon, after which the lander will descend to the surface. The lander module will carry a rover that it will deploy on the moon, and a few other pieces of scientific equipment. The lander and the rover are expected to be operational for about two weeks.

As in previous missions, the scientific mission will study the chemical composition of the lunar surface, local seismic activity, and plasma concentration, among other features. The propulsion module will have a payload called 'Spectro-polarimetry of Habitable Planet Earth' (SHAPE), which will track radiation from the earth to help identify the signatures of life, which future missions can use in turn to look for signs of life on habitable exoplanets. So Chandrayaan-3 is also to look beyond the Moon.

> This feat is yet another feather in the cap of the Indian Space Research Organisation (ISRO). No wonder it attracts talented youth from the best institutions in the country

Lessons learned from Chandrayaan-2 will help avoid design deficiencies that are likely to contribute to failures. Some such 'upgrades' already include strengthened legs on the lander and software updated to include failure scenarios.

Importance of the missions

Missions like Chandrayaan are important because many countries participate in them. These missions are collaborative global efforts that strengthen scientific exchange and camaraderie between countries.

There is scope for international collaboration in future missions to explore the south-polar region of the Moon. The craters here have locations that don't receive sunlight. These shadowed sites are cold and hold hydrogen, water, and ice. They could also host primordial material that could help us understand the origins of the Solar System. The biggest lunar crater is also in the south polar region. The origin of this crater, which formed about 4 billion years ago, is still unclear. So understanding our cosmic neighbour will go a long way towards gaining insights about the cosmos.

Why should India spend on these high-tech areas instead of investing in available technologies that can be used more readily for the public good? It is because they can be used for the public good, too. Developing countries need knowledge of such concepts to improve their citizens' quality of life. Space technologies have also become essential for weather prediction, assessment of marine resources, estimation of forest cover, communication, defence - to just name a few. Every country needs technologies of both futuristic and immediately relevant varieties, together with a well-thought-out apportionment of resources between these two areas.

Indeed, R. Chidambaram, a former Principal Scientific Advisor to the Government of India, once remarked that participating in an emerging technology makes a nation a leader in that field, giving it bargaining power when dealing with other countries. This in turn will enable a country to enhance its science and technology base to improve its citizens' and its prestige.

THE GIST

The scientific mission will study the chemical composition of the lunar surface, local seismic activity, and plasma concentration, among other features. The propulsion module will have a payload called 'Spectro-polarimetry of Habitable Planet Earth' (SHAPE), which will track radiation from the earth to help identify the signatures of life, which future missions can use in turn to look for signs of life on habitable exoplanets. Chandrayaan 3 also aims to look beyond the Moon

There is scope for international collaboration in future missions to explore the south-polar region of the Moon. The craters here have locations that don't receive sunlight. These shadowed sites are cold and hold hydrogen, water, and ice. They could also host primordial material that could help us understand the origins of the Solar System

Developing countries need such technology to improve their citizens' quality of life. Space technologies have also become essential for weather prediction, assessment of marine resources, estimation of forest cover, communication, defence - to just name a few

Chandrayaan: ISRO gears up with launch rehearsal

The Hindu Bureau
BENGALURU

The Indian Space Research Organisation (ISRO) on Tuesday completed the launch rehearsal of the Chandrayaan-3 mission.

"Chandrayaan-3 mission: The 'Launch Rehearsal' simulating the entire launch preparation and process lasting 24 hours has been concluded," the space agency tweeted.

India's third moon mission, Chandrayaan-3, is scheduled to be launched at 2.35 p.m. on July 14 from the Satish Dhawan Space Centre in Sriharikota. The spacecraft will be launched by the Launch Vehicle Mark-III (LVM3). Last week, ISRO Chairman S. Somanath said that if the launch takes place as scheduled, the landing on the lunar surface would most likely take place on August 23 or 24. Chandrayaan-3 is aimed at developing and demonstrating new technologies required for interplanetary missions.

Context

- India's third moon mission, Chandrayaan-3, is scheduled to be launched on July 14 from the Satish Dhawan Space Centre in Sriharikota.

Chandrayaan-1

- ISRO's first attempt was the Chandrayaan-1 mission, which began in October 2008 with a launch of the very successful Polar Satellite Launch Vehicle (PSLV).
- The rocket carried a lunar orbiter meant to go around the moon, like a satellite and an impact probe.
- The orbiter relieved the impact probe to hit the surface of the south polar region of the moon, to generate data relevant to designing a lunar rover that would be a part of the payload in a subsequent mission.
- While descending to the moon, the impactor probe collected information on the chemical composition of the lunar atmosphere.
- Notably, this mission established the availability of water molecules on the moon, a discovery that may be crucial for future crewed missions.
- The probe also carved the national flag of India on the Moon announcing the country's arrival.
- The mission did not last two years as planned, possibly due to overheating issues in the orbiter, but it achieved most of its scientific objectives. In a testament to its success, it received many accolades from the international community.

The Brandt Line

Lunar Landing

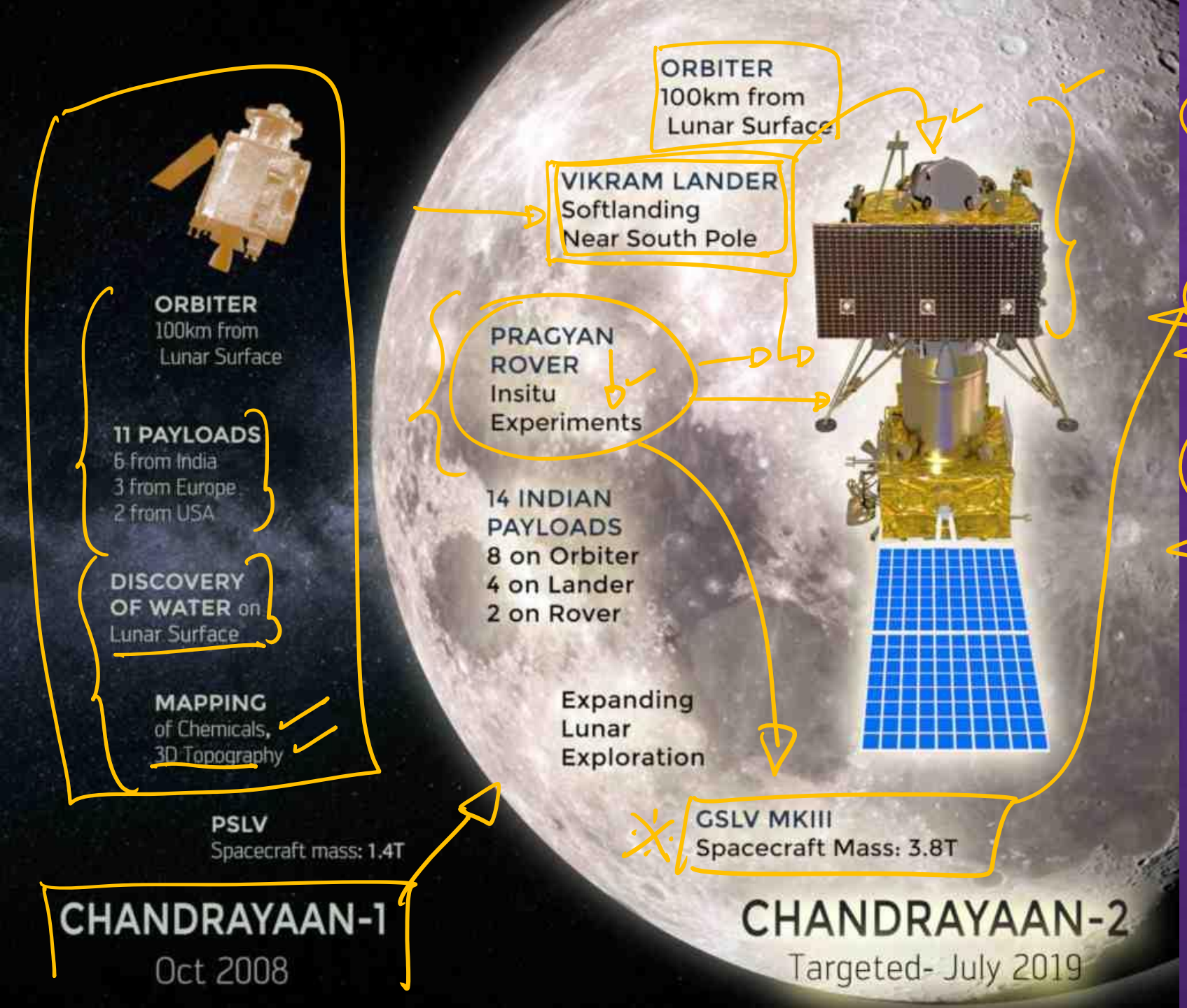
Lander Rover

Crewed Mission

Satellite

Experiments

Ice



C-2

2019

Lander
Rover

BYJU'S EXAM PREP | IAS

CHANDRAYAAN-3

INDIA TODAY

FACTS AND FIGURES

Name
Chandrayaan-3

Launch Vehicle
GSLV-MkIII

Mission Components
- Propulsion Module
- Lander
- Rover

Destination
Moon

Launch site
Satish Dhawan Space Centre
Sriharikota

Mission life
1 lunar daylight period or roughly 14 Earth days

LVM III → GSLV Mk-III

Mass
3900 kg

Landing site
Moon
South polar region

BYJU'S EXAM PREP | IAS

Chandrayaan-3

The Brandt Line

- ISRO is planning Chandrayaan-3 to demonstrate end-to-end capability for safe landing and roving on the lunar surface.
- The mission will be launched on board the Launch Vehicle Mark III (LVM 3, a.k.a. GSLV Mk III).
- The vehicle will carry a Vikram lander attached to a propulsion module. The latter will carry the former to a circular orbit around the moon, after which the lander will descend to the surface.
- The lander module will carry the Pragyan rover that it will deploy on the moon, and a few other pieces of scientific equipment.
- The lander and the rover are expected to be operational for about two weeks.

Chandrayaan-3

The Brandt Line

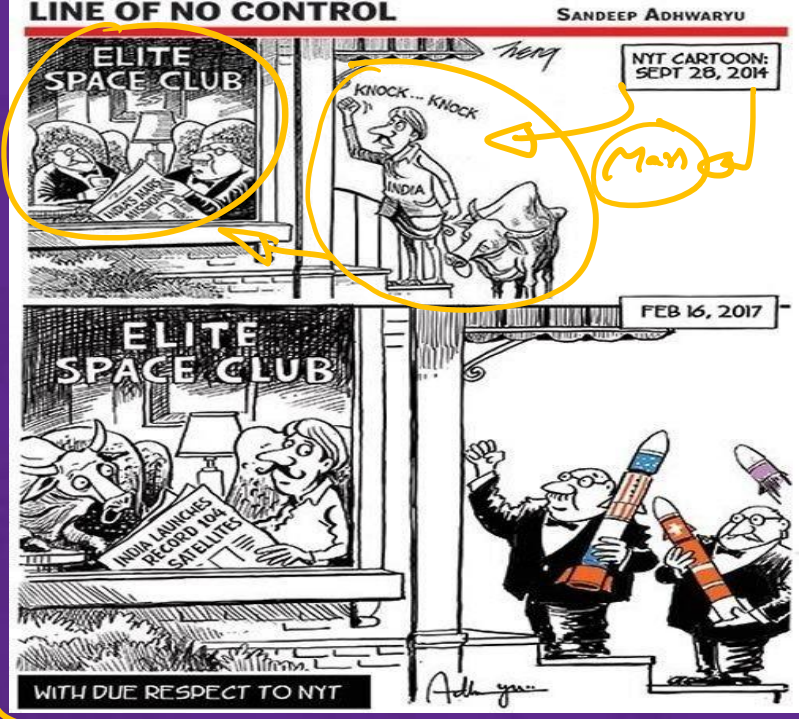
- The scientific mission will study the chemical composition of the lunar surface, local seismic activity, and plasma concentration, among other features.
- The propulsion module will have a payload called 'Spectro-polarimetry of Habitable Planet Earth' (SHAPE), which will track radiation from the earth to help identify the signatures of life.
- This can be used in future missions to look for signs of life on habitable exoplanets.

Importance of these missions

- Missions like Chandrayaan are important because many countries participate in them.
- These missions are collaborative global efforts that strengthen scientific exchange and camaraderie between countries.
- There is scope for international collaboration in future missions to explore the south polar region of the Moon.
- The craters here have locations that don't receive sunlight.
- These shadowed sites are cold and hold hydrogen, water, and ice.
- They could also host primordial material that could help us understand the origins of the Solar System.

How does it help the common man?

- Space mission like these can be used for the public good, too.
- Developing countries need knowledge of such concepts to improve their citizens' quality of life.
- Space technologies have also become essential for weather prediction, assessment of marine resources, estimation of forest cover, communication, defence – to just name a few.
- Every country needs technologies of both futuristic and immediately relevant varieties, together with a well-thought-out apportionment of resources between these two areas.
- Participating in an emerging technology makes a nation a leader in that field, giving it bargaining power when dealing with other countries.
- This in turn will enable a country to enhance its science and technology base to improve its citizens' and its prestige.



2. Page 6 – GS I (Geography) & GS III (DM)

HP

27th June

On the edge of a precipice

No respite: Work is on to clear the area on Tuesday after a massive landslip destroyed buildings at Shamti in Solan district of Himachal Pradesh. Since the onset of the monsoon, 29 flash floods and one cloudburst have hit the State. PTI (SEE ALSO PAGE 12)

North India's monsoon mayhem

Why was rainfall this pre-monsoon season above normal? Is global warming the only factor influencing the unpredictable monsoon? How did the warming of the Atlantic Ocean and the Himalayas affect the patchy distribution of rainfall this monsoon?

EXPLAINER

Raghu Murtugudde

The story so far:

Every year, the entire country awaits the onset and evolution of monsoon with baited breath. Each year tends to be different, and this year has managed to produce a rather unique onset and evolution thus far. The onset this season was delayed by unforeseen interactions between typhoons and cyclones. Cyclone Biparjoy was born after the onset and lingered for longer than normal to delay the arrival of monsoon over Mumbai by nearly two weeks. For the first time in over half a century, the city saw monsoon arrive together with Delhi. The monsoon trough thus ended up with an exaggerated curvature over northwest India.

How was the monsoon distributed?

The deficit due to the delayed onset has been all but wiped out but the distribution of rainfall remains as patchy as ever, with excess rainfall over the northern Western Ghats into northwest India and deficits extending in a horseshoe pattern from Uttar Pradesh into Odisha and back to the east into Chhattisgarh, Madhya Pradesh, and Maharashtra. Extreme heat has also been reported in parts of Himachal Pradesh, even as some areas of the State received heavy rainfall.

Did climate change influence this monsoon?

The impact of climate change has always been of great interest, but it is worth remembering that everything today happens in a warmer world that is also more humid. With global warming, a warm and humid atmosphere acts like a steroid for the weather. Every weather event now has some contribution from global warming. At the same time, one must also pay close attention to weather patterns that emerge due to other factors.

Climate woes: A man walks through a flooded alley in New Delhi on July 11. REUTERS

While the El Niño has been grabbing many headlines this year, it is not yet clear how much the current monsoon mayhem has had to do with the El Niño.

Additionally, wildfires thus far this year have burned over three-times the normal area and have also emitted about three times as much carbon dioxide. This has also had a contribution to the warming.

What are the other factors?

The Indian subcontinent is like a popcorn kettle that gets heated up as the Sun crosses over into the northern hemisphere in March. Rainfall is like the kernels of corn popping randomly around the kettle. That is, monsoon rainfall distribution always tends to be patchy.

Excess rainfall over northwest India is consistent with the Arabian Sea having warmed by about 1.5 degrees Celsius since January. This was expected, according to a study last year that the author was part of.

June contributes only about 15% of the rainfall to the seasonal total. The instabilities in the atmosphere that drive convection are not strong enough to drive large-scale rainfall during the pre-monsoon season. Rainfall this pre-monsoon was above normal due to a combination of the warm Arabian Sea and an unusually high number of western disturbances. As a result, soils were left moister than normal, which in turn affected the evolution of the monsoon. However, the mystery is that, despite averaging rainfall over a month, a season or even multiple seasons, rainfall distribution remains uneven. Disuniform terrain and heterogeneous land-use patterns are the likely culprits.

The Atlantic Ocean and the upper atmospheric circulation also tinker with the monsoon. The entire Atlantic Ocean has been warmer than normal since March. While the so-called Atlantic Niño, with a warm tropical Atlantic, generally tends to suppress monsoon rainfall, it is not clear what the impacts are when the entire Atlantic is as warm as it has been this year.

The strongest winds that occur in the upper atmosphere can spontaneously break into clockwise and anticlockwise patterns, especially when they run into mountainous terrain, such as the Himalaya. Strong clockwise winds, with air flowing out from the centre, in the upper atmosphere demand an anticlockwise circulation near the surface, in order to feed the upper-level outflow. Such a convergence near the surface can drive excess rainfall.

Finally, the warming over the Himalaya has not been uniform either. Some parts of the mountain chain are amplifying global warming, leading to rapid local warming. Irregular weather patterns during the monsoon superpose on these local features as a result of the winds expanding or compressing as they race up and down the narrow valleys. The results can be cloudbursts, heavy rains or even heatwaves – depending on the local flow patterns.

Such disparate weather patterns can occur side by side as well.

What next?

The conclusion is that the Indian subcontinent is a veritable popcorn kettle that can throw up many surprises. Everything is not directly attributable to global warming – even as every little weather event is happening in a warmer and wetter world. Only improved forecasts with sufficient granularity in space and time can reduce the element of surprise resulting from these weather monsters.

Raghu Murtugudde is a visiting professor at IIT Bombay and an emeritus professor at the University of Maryland.

THE GIST

- The impact of climate change has always been of great interest, but it is worth remembering that everything today happens in a warmer world that is also more humid. With global warming, a warm and humid atmosphere acts like a steroid for the weather.
- At the same time, one must also pay close attention to weather patterns that emerge due to other factors. While the El Niño has been grabbing many headlines this year, it is not yet clear how much the current monsoon mayhem has had to do with the El Niño.
- Excess rainfall over northwest India is consistent with the Arabian Sea having warmed by about 1.5 degrees Celsius since January. This was expected, according to a study last year that the author was part of.

Rain toll points to man-made disaster in Himachal Pradesh

Anthropogenic factors such as deforestation, unsustainable construction have intensified damage caused by rain-related events even as unprecedented downpour has caught the State off guard

Vikas Vasudeva
CHANDIGARH

In less than a month since the onset of the monsoon, from June 24 to July 10, over 41 incidents of landslips, 29 flash floods and one cloudburst have occurred so far in Himachal Pradesh, with relentless rain pounding the hill State and leaving behind a trail of destruction.

At least 80 people have lost their lives in rain-related incidents. This has yet again triggered a debate over whether the ongoing "fury of nature" is a man-made disaster inevitably visited upon the Himalayan region.

Manshi Asher, an environmentalist associated with the Himdhara Environment Research and Action Collective, said the flash floods in Himachal Pradesh had been evidently triggered by excess rainfall but they had also been "intensified" by muck and debris dumped along streams and rivers.

Gone in a jiffy: A section of the Manikaran-Chandigarh highway washed away in the flash floods in Kullu on Tuesday. PTI

"These are directly or indirectly caused due to land-use change, erosion caused by deforestation, and slopes destabilised by construction. Building along the river bed in floodplains blocks the path of the river in spate and is harmful. But it is the excavation, tree felling and digging of slopes for roads, highways, buildings and dams that causes landslips which, in turn, lead to flash floods, causing damage downstream," Ms. Asher said.

'Highly vulnerable'

Himachal Pradesh's State of the Environment Report, released in 2022 by the Department of Environment, Science and Technology, points out that mountain areas are highly vulnerable to natural disasters, and development over the years has compounded the problem by upsetting the natural balance of various physical processes. The report added that the increased pressure on the mountain environment has contributed in some measure to environmental problems such as landslips, land subsidence, removal of vegetation and soil erosion.

Naresh Chauhan, Principal Adviser to the Chief Minister, said while the current spell of rain was unprecedented, there is a need to ensure that debris and muck are not thrown into rivers or rivulets during the construction of roads, projects or dwellings. Also, construction near rivers needs to be regulated, he added.

3. Page 6 & 10 – GS III (E&E)

BYJU'S EXAM PREP | IAS

Green washing

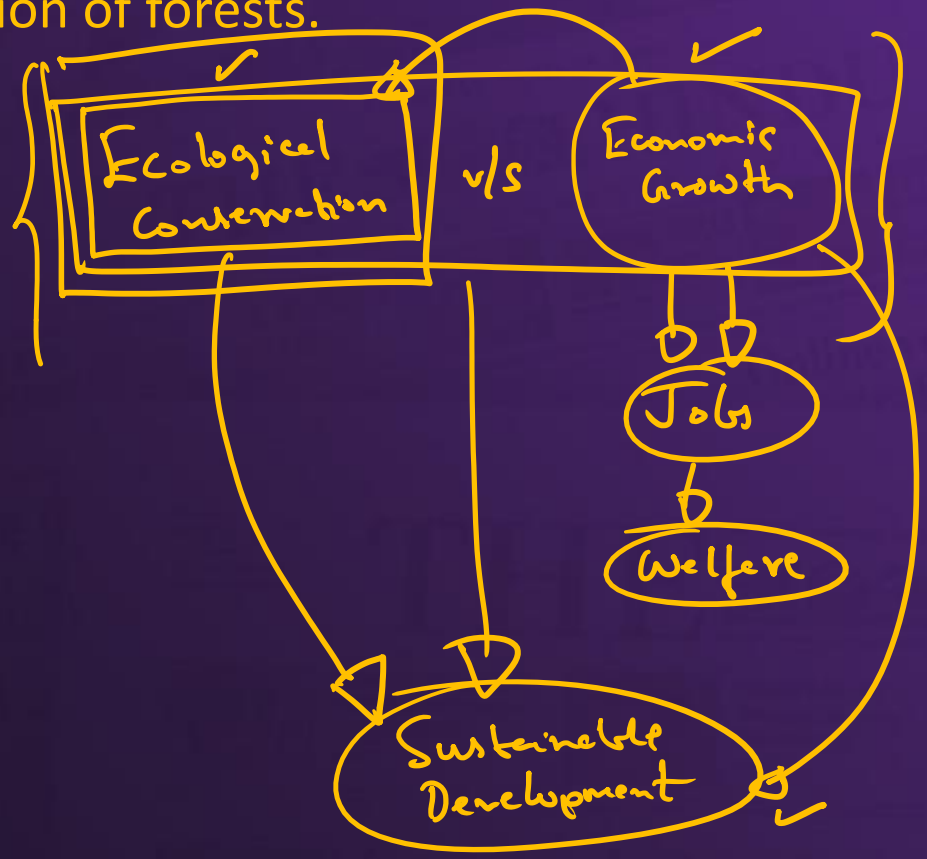
Changes to conservation laws must be backed by scientific evidence

The Forest (Conservation) Amendment Bill, 2023, that is being deliberated upon by a Joint Committee of Parliament, is a contentious piece of legislation that signals the complex challenges involved in balancing industrial development and the conservation of forests. While industrialisation inevitably means usurping greater tracts of forest land and ecosystems, the Forest (Conservation) Act, 1980 has been the mantelpiece legislation that has empowered the state to regulate this and impose costs on such industrial exploitation. Originally meant for notified forests, a landmark Supreme Court judgment, in the T.N. Godavarman Thirumalpad case (1996), among other things, broadened the scope of such protection to even those not officially classified so. India's forest cover has seen only marginal increases, as biennial reports of the Forest Survey of India illustrate. Growth in forest cover inside officially recorded forests is stagnant, or at best incremental. It is tree cover in orchards, plantations and village homesteads that has been on the rise and supplementing India's claim that 24% of its area is under forest and tree cover. India has committed to increasing this number to 33% and adding a carbon sink of 2.5 billion to 3 billion tons of CO_2 this way, by 2030, as part of its international climate commitments.

The existing Forest (Conservation) Act, 1980 – in the Environment Ministry's reckoning – was insufficient for these ends, as it did not incentivise private agro-forestry and tree plantation activities. From 2019 to 2021, India added 1,540 square kilometres of forest cover of which 1,509 sq. km was outside recorded forest area. The new amendments to the Forest Act gave such incentives by clearly defining the limits of the 1996 judgment. Only land recorded as 'forest' in any government record on or after 1980 would invoke provisions of the Act. Forest land authorised by States for non-forestry uses between 1980-1996 would not invoke provisions of the Act. The amendments effectively mean States can no longer classify unclassified forest land, or patches of trees with forest-like characteristics as 'forest land'. The amendments also allow forest land, up to 100 km near India's borders, to be appropriated, without central approval, for "strategic and security" purposes. The primary criticism is that these amendments do not really contribute to regenerating natural forest, but rather incentivise afforestation for commercial ends. What is worrying is that the parliamentary committee, despite its statutory privileges, has not expressed any opinion or suggestion on the way forward. Grooming private forests might look good in theory but expecting them to be a permanent carbon stock is wishful thinking given that strong market incentives exist to use them as 'carbon credits'. While new climate realities might necessitate changes to the way conservation laws are interpreted, these must be backed by rigorous scientific evidence.

Context:

- The Forest (Conservation) Amendment Bill, 2023, that is being deliberated upon by a Joint Committee of Parliament, is a contentious piece of legislation that signals the complex challenges involved in balancing industrial development and the conservation of forests.



Forest Conservation Act 1980

The Forest (Conservation) Act of 1980 (FCA, 1980) is an act by the Parliament of India which ensures conservation of forest and its resources.

It was enacted by the Parliament of India in order to control the ongoing deforestation of the forests of India. It came into force on October 25, 1980 containing five sections.

Need for Forest Conservation Act, 1980

Forests are an important resource that nature can bestow upon mankind. Therefore, it is the duty of every citizen to preserve the ecosystems of forests. But due to rapid deforestation, the cycle of nature is itself being disrupted. Therefore, the need to bring about a law to ensure the preservation of forest was needed.

One of the first legal drafts to protect forest tracts was the Indian Forest Act, 1865 replaced by a 1927 version of the same act. However, it was more geared towards protecting the commercial interests of the British Empire in India.

The act gave authority to the British to restrict tribal activities by levying taxes on timber and forest services. In other words, it mainly regulated the cutting of timber and flow of raw materials rather than protecting forests.

Upon independence, the President of India enforced the Forest (Conservation) Ordinance in 1980 which was later repealed by virtue of Section 5 of the Forest (Conservation) Act, 1980. Under the 1980 Act, the restriction was made on the use of the forests for non-forest purposes.

Objectives of the Forest Conservation Act 1980

The aim of the Forest is to preserve the forest ecosystem of India by fulfilling the following objectives:

1. Protect the forest along with its flora, fauna and other diverse ecological components while preserving the integrity and territory of the forests.
2. Arrest the loss of forest biodiversity
3. Prevent forest lands being converted into agricultural, grazing or for any other commercial purposes and intentions.

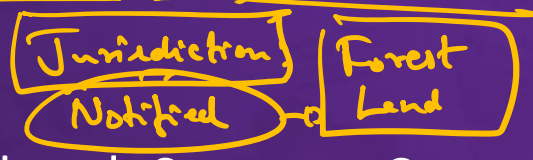
Features of the Forest Conservation Act 1980

The Forest Conservation Act of 1980 come with the following features:

1. The Act restricts the state government and other authorities to take decisions first without permission from the central government.
2. The Forest Conservation Act gives complete authority to the Central government to carry out the objectives of the act.
3. The Act levies penalties in case of violations of the provisions of FCA.
4. The Forest Conservation Act will have an advisory committee which will help the Central government with regard to forest conservation.

The Forest (Conservation) Act, 1980:

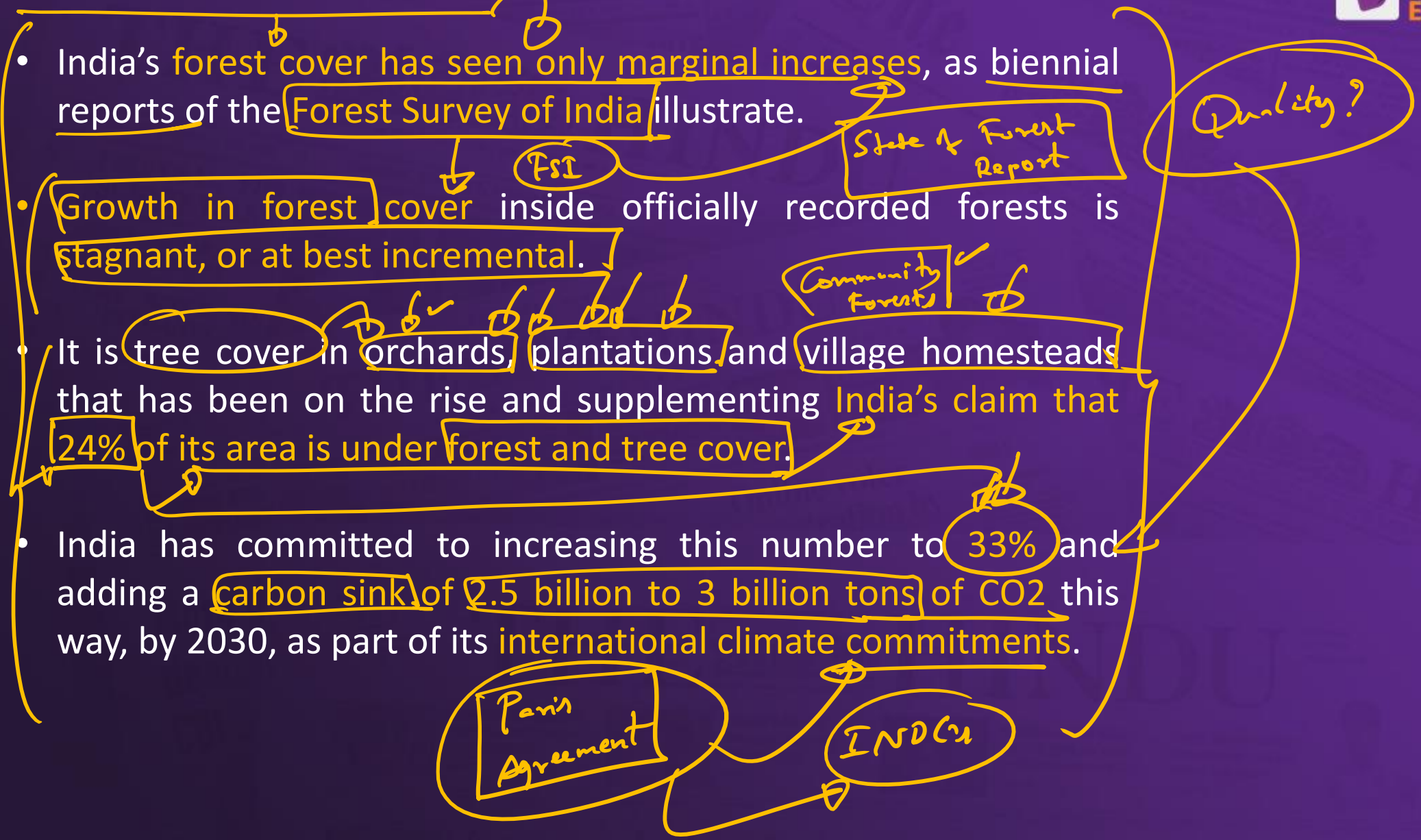
- While industrialization inevitably means usurping greater tracts of forest land and ecosystems, the Forest (Conservation) Act, 1980 has been the mantelpiece legislation that has empowered the state to regulate this and impose costs on such industrial exploitation.



- Originally meant for notified forests, a landmark Supreme Court judgment, in the T.N. Godavarman Thirumalpad case (1996), among other things, broadened the scope of such protection to even those areas not officially classified as forests.

Need for amendments:

- India's forest cover has seen only marginal increases, as biennial reports of the Forest Survey of India illustrate.
- Growth in forest cover inside officially recorded forests is stagnant, or at best incremental.
- It is tree cover in orchards, plantations and village homesteads that has been on the rise and supplementing India's claim that 24% of its area is under forest and tree cover.
- India has committed to increasing this number to 33% and adding a carbon sink of 2.5 billion to 3 billion tons of CO_2 this way, by 2030, as part of its international climate commitments.



Need for amendments:

- The existing Forest (Conservation) Act, 1980 — in the Environment Ministry's reckoning — was insufficient for these ends, as it did not incentivise private agroforestry and tree plantation activities.

- From 2019 to 2021, India added 1,540 square kilometres of forest cover of which 1,509 sq. km was outside recorded forest area.

Proposed amendments:

- The new amendments to the Forest Act gave such incentives by clearly defining the limits of the 1996 judgment.
- Only land recorded as 'forest' in any government record on or after 1980 would invoke provisions of the Act.
- Forest land authorized by States for non-forestry uses between 1980-1996 would not invoke provisions of the Act.
- The amendments effectively mean States can no longer classify unclassified forest land, or patches of trees with forest-like characteristics as 'forest land'.
- The amendments also allow forest land, up to 100 km near India's borders, to be appropriated, without central approval, for "strategic and security" purposes.

Criticism:

- The primary criticism is that these amendments do not really contribute to regenerating natural forest.
- But rather incentivise afforestation for commercial ends.
- What is worrying is that the parliamentary committee, despite its statutory privileges, has not expressed any opinion or suggestion on the way forward.
- Grooming private forests might look good in theory but expecting them to be a permanent carbon stock is wishful thinking given that strong market incentives exist to use them as 'carbon credits'.

6 Opposition members on House panel raised alarm over Forest Bill exemptions

Sobhana K. Nair
NEW DELHI

At least six out of the 31 members of the Joint Parliamentary Committee on Forest (Conservation) Amendment Bill have filed dissent notes, raising an alarm over exemptions extended to significant tracts of land in the draft legislation, even as the panel cleared the controversial Bill without proposing any changes.

The Bill is expected to be tabled in Parliament in the Monsoon Session that starts on July 20.

The dissenting members are Congress MPs Pradyot Bordoloi (from the Lok Sabha) and Phulo Devi Netam (Rajya Sabha); Trinamool Congress MPs Jawahar Sircar (Rajya Sabha) and Sajda Ahmed (Lok Sabha); and DMK MPs T.R. Baalu and R. Girirajan. The Bill seeks to amend the Forest (Conservation) Act, 1980, that was brought in to check uncontrolled and unregulated use of forest land for various non-forestry uses.

Multi-pronged threat

Both the Congress and Trinamool members have raised objections to amendment that provides exemption for the lands, "situated within a distance of 100 km along international borders or Line of Control or Line of Actual Control," for "construction of strategic linear projects of national importance and concerning national security".

The Congress MPs noted that this clause could prove detrimental to significant forests in Himalayan, trans-Himalayan and north-eastern regions. Clearing such forests without proper assessment and mitigation plan will not only threaten the biodiversity of vulnerable ecological and geologically sensitive areas but also could trigger extreme weather events, they said. Mr. Sircar, the Trinamool MP, recommended that the State governments concerned should also be consulted before clearing the forests in such sensitive areas. He also recommended that instead of extending the exemption to all lands within a distance of 100 km along international borders, it should be limited to area along the "Himalayan" borders.

Members from all the three parties dissented against the move to rename the Bill *Van [Sanrakshan Evam Samvardhan] Adhiniyam*, instead of the existing Forest (Conservation) Act. Mr. Bordoloi noted that the new terminology leaves out non-Hindi speaking population, while DMK's Girirajan, said that such "Sanskritic terminology is untenable".

The DMK members also said that the amended Act infringed on the State government's rights.

Prelims Bytes

4. Page 12 – Governance & IR

415 million Indians came out of multidimensional poverty in 15 years, says UNDP study

Press Trust of India
UNITED NATIONS

The report said that 25 countries, including India, halved their global MPI values within 15 years

A total of 415 million people moved out of poverty in India within just 15 years from 2005-06 to 2019-21, with its incidence falling from 55.1% to 16.4% during the period, the United Nations (UN) said on Tuesday.

The latest update of the global Multidimensional Poverty Index (MPI) was released by the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative (OPHI) at the University of Oxford.

It said that 25 countries, including India, successfully halved their global MPI values within 15 years, showing that rapid progress is attainable. These countries include Cambodia, China, Congo, Honduras, India, Indonesia, Morocco, Serbia and Vietnam.

"The report demonstrates that poverty reduction is achievable. However, the lack of comprehensive data during the period of the COVID-19 pandemic poses challenges in assessing immediate prospects," it added.

In 2005-06, about 645 million people were in multidimensional poverty in India, with this number declining to about 370 million in 2015-16 and 230 million in 2019-21.

'Fast progress'

The report noted that deprivation in all indicators declined in India and "the poorest States and groups, including children and people in disadvantaged caste groups, had the fastest absolute progress".

According to the report, people who are multidimensionally poor and deprived under the nutrition indicator in India declined from 44.3% in 2005-06 to 11.8% in 2019-21, and child mortality fell from 4.5% to 1.5%.

"Those who are poor and deprived of cooking fuel fell from 52.9% to 13.9% and those deprived of sanitation fell from 50.4% in 2005/2006 to 11.3% in 2019/2021," according to the report.

In the drinking water indicator, the percentage of people who are multidimensionally poor and deprived fell from 16.4 to 2.7 during the period, electricity (from 29 to 2.1) and housing from 44.9 to 13.6.

The report said countries with different incidences of poverty also halved their global MPI value.

While 17 countries that did so had an incidence under 25% in the first period, India and Congo had a starting incidence above 50%.

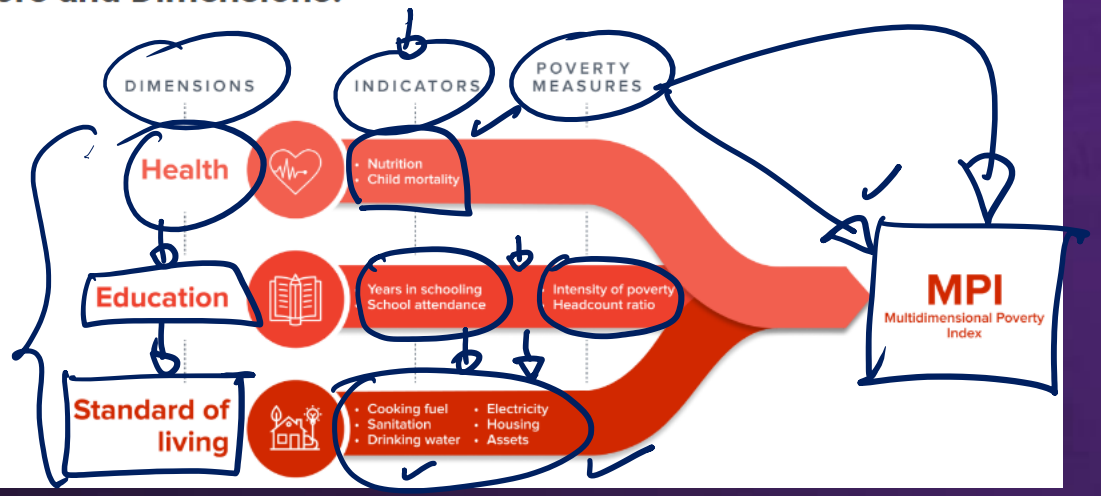
India was among the 19 countries that halved their global MPI value during one period – for India it was 2005-06 to 2015-16.

According to the 2023 release, 1.1 billion out of 6.1 billion people (just more than 18%) live in acute multidimensional poverty across 110 countries.

What is the Global Multidimensional Poverty Index?

- **About:**
  - The index is a **key international resource** that measures acute multidimensional poverty across more than 100 developing countries.
  - It was **first launched in 2010 by the OPHI** and the Human Development Report Office of the UNDP.
  - The **MPI monitors deprivations in 10 indicators** spanning health, education and standard of living and includes both incidence as well as intensity of poverty.

MPI Indicators and Dimensions:



5. Page 13 – IR

First French long-range missiles reach Ukraine

Agence France-Presse
VILNIUS

France has already made a delivery of a number of SCALP long-range cruise missiles to Ukraine, a military source told AFP on Tuesday, after President Emmanuel Macron announced the supplies.

The official, speaking at the NATO summit, did not say how many SCALP – an air-launched British-French missile known to U.K. forces as the "Storm Shadow" and the longest-range Western weapon in Ukraine – had been sent.

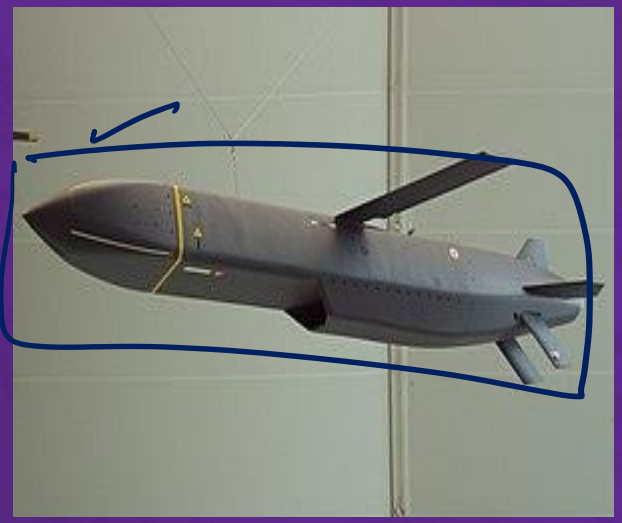
Mr. Macron said the new missile delivery was designed to allow Ukraine to strike at Russian occupation forces "in depth" during its counteroffensive to liberate its territory.

Kremlin spokesman Dmitry Peskov warned that France's decision to send the missile "is a mistake with consequences for the Ukrainian side, because this will of course force us to take countermeasures."

Storm Shadow is a Anglo-French low-observable, long-range, air-launched cruise missile developed since 1994 by Matra and British Aerospace, and now manufactured by MBDA. "Storm Shadow" is the weapon's British name; in France it is called ***SCALP-EG*** (which stands for "*Système de Croisière Autonome à Longue Portée – Emploi Général*"; English: "Long Range Autonomous Cruise Missile System – General Purpose"). The missile is based on the French-developed Apache anti-runway cruise missile, but differs in that it carries a unitary warhead instead of cluster munitions.[4]

What is SCALP? UK - France

SCALP is a 1,300kg (2,870lb) missile armed with conventional explosives, usually launched from aircraft such as the UK air force's Eurofighter Typhoon or France's Rafale.



Mains Practice Questions

1. Evaluate India's lunar missions in detail and how do such high-tech, expensive missions help the common man? (250 words, 15 marks)

2. Critically evaluate the proposed amendments to the Forest Conservation Act. (250 words, 15 marks)

BYJU'S EXAM PREP | IAS

THE HINDU ANALYSIS

www.thehindu.com

INDIA'S NATIONAL NEWSPAPER SINCE 1878

12th JULY, 2023