

The Hindu Important News Articles & Editorial For UPSC CSE

Wednesday, 14th August , 2024

Edition: International | Table of Contents

<p>Page 04 Syllabus : GS 2 : Social Justice</p>	<p>ILO to help farmers eliminate child labour, forced work in cotton fields</p>
<p>Page 03 Syllabus : GS 2 : Governance and Social Justice</p>	<p>Egg or sperm donor has no legal right on child : Bombay HC</p>
<p>Page 07 Syllabus : GS 3 : Environment</p>	<p>The melting of polar ice due to climate change is making days longer</p>
<p>Page 10 Syllabus : GS 2 : Indian Polity & Constitution</p>	<p>An overview of governance in Delhi</p>
<p>Location In News</p>	<p>St Martin's Island</p>
<p>Page 08 : Editorial Analysis: Syllabus : GS 3 : Science & technology : Achievements Of Indians In S&T</p>	<p>Hints of the corporatisation of science research in India</p>
<p>International Organizations</p>	<p>Topic: Indian Ocean Rim Association</p>

Page 04 : GS 2 : Social Justice : Issues Related to Child

Cotton and hybrid cotton seeds from India are listed by the U.S. Labor Department as products made using child or forced labor.

- ▶ To address this issue, the Confederation of Indian Textile Industry (CITI) and the International Labour Organisation (ILO) have launched a new project to end child labour.

ILO to help farmers eliminate child labour, forced work in cotton fields

The Hindu Bureau
NEW DELHI

As cotton and hybrid cotton seeds from India continue to remain in the United States Labour Department's 'List of Goods Produced by Child Labour or Forced Labour', the Confederation of Indian Textile Industry (CITI) has joined hands with the International Labour Organization (ILO) to help farm workers and small and medium farmers engaged in cotton cultivation.

The joint project – Promoting Fundamental Principles and Rights at Work (FPRW) – aims to promote effective recognition of freedom of association and the right to collective bargaining, elimination of child labour, abolition of forced labour, elimination



The project aims to promote effective recognition of freedom of association.

of all forms of discrimination, and the promotion of a safe and healthy working environment among the cotton growing community in India. The project was launched here on Tuesday and is expected to reach out to 65 lakh cotton farmers in 11 States.

Insaf Nizam, ILO's Fundamental Principles and Rights at Work Specialist, said the issues at the fields

can be addressed through a productive approach by understanding what is happening at the grass-roots level.

"ILO's agenda is to promote freedom, equity and dignity," he said and added that economic growth should not be at the cost of decent work.

"The fundamental principles and rights at work convention (of the ILO) applies to all ILO member States whether they have ratified it or not. It is part and parcel of the ILO's Constitution," he said and added that the ILO will work with all stakeholders to address problems of cotton cultivators.

CITI secretary general Chandrima Chatterjee said by leveraging the confederation's existing farmer connections and network in

the region, and by capitalising on the knowledge products developed by the ILO, the new initiative will ensure stronger collaboration with government bodies, employers' and workers' organisations, and civil society groups. "Together, we will work to ensure that cotton-growing communities are well-informed and empowered to assert their rights under the FPRW."

Ms. Chatterjee said that by upholding the FPRW, cotton-growing communities can foster a more equitable, sustainable, and prosperous environment for all workers, leading to long-term benefits for individuals and families.

The project also aims to promote financial inclusion and bank linkage for the farmers and agriculture workers.

About the new initiative

- ▶ The joint project, Promoting Fundamental Principles and Rights at Work (FPRW), aims to improve labor conditions among cotton farmers by promoting fundamental labor rights.

- **Focus Areas:** The project will focus on freedom of association, collective bargaining, elimination of child and forced labor, abolition of discrimination, and ensuring a safe working environment.
- **Scope:** The initiative will impact around 6.5 million cotton farmers across 11 states in India.
- By upholding FPRW, cotton-growing communities can foster a more equitable, sustainable, and prosperous environment for all workers, leading to long-term benefits for individuals and families.
- The project also aims to promote social finance and financial inclusion/bank linkage for the farmers and agriculture workers and enhance their access to digital literacy programs of the government.

About Child Labour

- The International Labour Organization (ILO) defines child labour as work that deprives children of their childhood, potential, and dignity, and is harmful to their physical and mental development.
- Sustainable Development Goal 8.7 aims to end child labour by 2025.

Where are these Child Labourers Deployed?

- **Bonded Labour:** Including child soldiers and trafficking.
- **Industrial Labour:** Brick kilns, carpet weaving, garment making, domestic service, food and refreshment services, agriculture, fisheries, and mining.
- Sexual Exploitation, Production of Child Pornography

Factors Responsible for Child Labour

- Poverty, Migration and Emergencies
- **Social Norms:** Acceptance of child labour in certain communities.
- **Lack of Decent Work Opportunities:** For adults and adolescents.

Consequences Associated with Child Labour

- **Health Risks:** Occupational diseases like skin diseases, lung diseases, weak eyesight, TB, etc.
- **Sexual Exploitation:** Vulnerability at the workplace.
- **Education Deprivation:** Lack of access to schooling.
- **Economic Threat :** Threat to national economy and informal sector issues.
- **Cycle of Poverty:** Child labour perpetuates poverty through reduced human capital accumulation.

How Child Labour Becomes a 'Roadblock' to India's Human Capital Accumulation

- **Deprivation of Rights:** Robs children of their potential and dignity.
- **Opportunity Costs:** Impacts human capital development and the ability to develop resources.
- **Vicious Cycle:** Short-term income benefits lead to long-term poverty due to reduced human capital.
- **Health Issues:** Physical and psychological impacts from unsafe working conditions.
- **Lack of Education and Skills:** Results in poor-paying jobs and perpetuates poverty.
- **Micro Level Impact:** Poor health and education lead to low-paying jobs and a cycle of child labour in future generations.
- **Macro Level Impact:** Skills gap increases youth unemployment, affecting long-term economic growth.

Policy Interventions Against Child Labour in India

- **Child Labour Act (Prohibition and Regulation) 1986:** Prohibits children under 14 years from working in hazardous industries.

- ➔ **Child Labour (Prohibition & Regulation) Amendment Act 2016:** Prohibits employment of children below 14 years in all work and adolescents (14-18 years) in hazardous occupations.
- ➔ **Child Labour (Prohibition & Regulation) Amendment Rules 2017:** Provides a framework for prevention, prohibition, rescue, and rehabilitation. Clarifies issues related to family work and definitions.
- ➔ **Additional Policies:** MGNREGA 2005, Right to Education Act 2009, and Mid-Day Meal Scheme promote education and wage employment for rural families.

Constitutional Provisions for Child Upliftment

- ➔ **Article 21 A: Right to Education:** Provides free and compulsory education to children aged 6 to 14 years.
- ➔ **Article 24:** Prohibits employment of children below 14 years in factories and hazardous work.
- ➔ **Article 39:** Ensures that children's health and strength are not abused and that economic necessity does not force children into unsuitable work.

About International Labour Organization

- ➔ International Labour Organization (ILO) is the only tripartite U.N. agency, since 1919. It brings together governments, employers and workers of 187 member States, to set labour standards, develop policies and devise programmes promoting decent work for all women and men.
- ➔ **Functions of the ILO**
 - Creation of coordinated policies and programs, directed at solving social and labour issues.
 - Adoption of international labour standards in the form of conventions and recommendations and control over their implementation.
 - Assistance to member-states in solving social and labour problems.
 - Human rights protection (the right to work, freedom of association, collective negotiations, protection against forced labour, protection against discrimination, etc.). Research and publication of works on social and labour issues.
- ➔ **Objectives of the ILO**
 - To promote and realize standards and fundamental principles and rights at work.
 - To create greater opportunities for women and men to secure decent employment.
 - To enhance the coverage and effectiveness of social protection for all.
 - To strengthen tripartism and social dialogue.

UPSC Prelims PYQ : 2018

Ques : International Labour Organization's Conventions 138 and 182 are related to:

- (a) Child Labour
- (b) Adaptation of agricultural practices to global climate change
- (c) Regulation of food prices and food security
- (d) Gender parity at the workplace

Ans: (a)



Page 06 : GS 2 : Governance and Social Justice : Government Policies & Interventions and Issues Related to Women

The Bombay High Court's ruling clarifies that egg or sperm donors do not have legal parental rights. This decision arose from a case where a donor sought to claim parenthood of twins born through surrogacy.

- ➔ The court upheld the legal framework and granted visitation rights to the biological mother.

About the news:

- ➔ The Bombay High Court ruled that donating eggs or sperm does not grant the donor legal entitlement to claim parenthood.
- ➔ The case involved a woman who donated eggs to her sister and brother-in-law for surrogacy.
- ➔ After the twins were born, the donor claimed a right to parenthood due to her biological connection.
- ➔ The High Court, led by Justice Milind Jadhav, rejected this claim, citing that the donor's role is limited to being a voluntary donor, not a legal parent.
- ➔ The court referred to the National Guidelines for ART Clinics (2005) and the Surrogacy Act, which do not recognize egg or sperm donors as legal parents.
- ➔ The court granted the petitioner access to her twin daughters, emphasising proper application of legal principles regarding parental rights.

What is Surrogacy?

➔ **About:**

- Surrogacy is an arrangement in which a woman (the surrogate) agrees to carry and give birth to a child on behalf of another person or couple (the intended parent/s).

Egg or sperm donor has no legal right on child: Bombay HC

Court allows woman to visit her twin daughters born through surrogacy; her sister had claimed she was the biological parent as she was the donor

Purnima Sah
MUMBAI

The Bombay High Court on Tuesday held that merely donating eggs or sperm does not give legal entitlement to the donor to claim that he or she is the biological parent of the child.

Pronouncing the verdict that was reserved on August 2, a single-judge Bench of Justice Milind Jadhav dismissed the argument of a woman (petitioner's sister) who had volunteered to donate her oocyte (eggs) to her sister and brother-in-law who could not conceive naturally, and said the sister had no legitimate right to claim that she was the biological parent of the twins.

The Bench was hearing a plea filed by a woman (petitioner) who challenged a trial court order that refused to give her visitation rights and access to her twin daughters born through surrogacy.

Appearing for the petitioner, advocate Ganesh Gole argued that since the twin girls are of growing age, the petitioner needs to



The Bench was hearing a plea challenging a trial court order that refused visitation rights.

be given visitation rights. "When the petitioner failed to conceive naturally, the couple consulted a gynaecologist who advised them to go for altruistic surrogacy through an egg donor and that is when the petitioner approached her younger sister," the advocate said.

Later, the husband left the petitioner, took away the twins, and started living with the sister.

2005 guidelines

The judge referred to the National Guidelines for Accreditation, Supervision and Regulation of ART (Assisted Reproductive Technology) Clinics in India, enacted in 2005, and not

ed, "The younger sister of petitioner can have no right whatsoever to intervene and claim to be the biological mother of the twin daughters as argued. The submissions on behalf of the husband that his wife's younger sister being the oocyte donor is the biological mother stands rejected outrightly in view of the settled position in law on the basis of the guidelines and the Surrogacy Act enacted subsequently. The limited role of the younger sister of petitioner is that of an oocyte donor, rather a voluntary donor and at the highest, she may qualify to be a genetic mother and nothing more, but by such qualification, she would have no intending legal right whatsoever to claim to be the biological mother of the twin daughters as the law clearly does not recognise so."

Justice Jadhav held that the lower court order that denied visitation rights to the petitioner was without proper application of mind. The court granted the petitioner visitation rights and access to the twin daughters.

Daily News Analysis

- A surrogate, sometimes also called a gestational carrier, is a woman who conceives, carries and gives birth to a child for another person or couple (intended parent/s).
- ➔ **Altruistic surrogacy:**
 - It involves no monetary compensation to the surrogate mother other than the medical expenses and insurance coverage during the pregnancy.
- ➔ **Commercial surrogacy:**
 - It includes surrogacy or its related procedures undertaken for a monetary benefit or reward (in cash or kind) exceeding the basic medical expenses and insurance coverage.

UPSC Prelims PYQ : 2020

Ques : In the context of recent advances in human reproductive technology, "Pronuclear Transfer" is used for :

- (a) Fertilization of egg in vitro by the donor sperm
- (b) Genetic modification of sperm producing cells
- (c) Development of stem cells into functional embryos
- (d) Prevention of mitochondrial diseases in offspring

Ans: (d)

Page : 07 : GS 3 : Environment : Climate change – Effects of climate change

Recent research indicates that climate change is slowing the Earth's rotation due to melting polar ice caps, which alters the planet's moment of inertia.

➔ This subtle change, affecting timekeeping and technology, underscores the broader impact of climate change on fundamental planetary processes and the urgency of addressing global emissions.

The melting of polar ice due to climate change is making days longer

For people in low-lying coastal areas, rising sea levels because of melting ice have more devastating consequences than the wobble of the earth's axis or a lengthening day. Nevertheless, this is an example of how climate change affects our planet, pushing us towards a desperate need to curb emissions before the situation spins out of control

Rohini Subrahmanyam

Scientists are attributing a slowing in the earth's rotation to climate change. Researchers have discovered that the melting polar ice caps have caused the earth to spin slower. This can lead to minuscule changes in the actual duration of a day – something that, ironically, does not affect our daily lives as much but could affect the technology we rely on.

As we build more connections not just among ourselves in this world but also with outer space, tools that rely on precise timekeeping, like computer networks and the ones involved in space travel, can be thrown off course by this change.

Making the world go around...

A basic physics phenomenon called the conservation of angular momentum is key to what is happening to the earth right now. When an ice skater rotates, if their arms are held in tightly, their moment of inertia decreases, and they spin faster. If they stretched their arms out wide, their moment of inertia would increase, making them spin slower. This is because angular momentum – a product of the moment of inertia and angular velocity – is conserved no matter how the skater is spinning. As polar ice continues to melt rapidly in a warming world, the globe isn't affected very differently from the spinning ice-skater.

"When polar ice sheets and global glaciers melt, then this would go to the equatorial regions – we call this pole-to-equator mass flux," Mostafa Kiani Shahvandi, a geophysicist at ETH Zurich and the lead author of the July 15 paper describing the recent results, said. "As the ice sheets melt, the earth's oblateness increases, and the region around the equator elongates slightly. The moment of inertia increases, and the rotation rate gets smaller."

Water from the melt flows towards the equator, making the earth bulge out slightly, slowing its rotation and increasing the time taken to complete one rotation, lengthening our day.

'A pretty big thing'

Using a mix of climate models and real-world data, the scientists looked at a 200-year period, between 1900 and 2100. They found that over the last two decades, the changing climate's effects on sea levels around the equator have slowed the rate of the earth's rotation by around 1.3 milliseconds (ms) per century.

Based on their projections, if the high emission scenarios persist, this rate will change to 2.6 ms per century. This will



The coastline of a small island off the coast of Antarctica, seen from a window on a commercial flight in 2017. After the previous ice age, a large quantity of ice melted from the northernmost and the southernmost parts of the earth, causing the planet to spin faster. MATT PALMER/UNSPASH

end up making climate change the dominant factor in slowing the earth's rotation, surpassing other factors.

"What's impressive about this is that it's another indicator of just how big the effect of climate change has become," Duncan Agnew, an emeritus professor of geophysics at the Scripps Institute of Oceanography at the University of California, San Diego, said. "The fact that it can change – not by a large amount, but still, some amount – the actual rotation rate of the entire earth, it's a pretty big thing to have been affected."

The effect may be in the order of milliseconds, but it can still affect accurate timekeeping with atomic clocks. Even though we have kept time since the 1950s with the help of these ultra-precise devices, we also track the time taken for the earth's rotations and ensure they both match up. Just like the earth's revolution around the sun takes just a bit longer than 365 days, requiring the addition of a leap day, its rotation is also not always exactly 24 hours. It's a couple of milliseconds more.

When a second is a lot

A process called lunar tidal friction, or the moon pulling on the earth's oceans, has already been slowing the planet's rotation at about 2 ms per century. So if right now the earth takes about 2 ms longer to complete one day than the time predicted



Tools that rely on precise timekeeping, like computer networks and the ones involved in space travel, could be thrown off course

by atomic clocks, a 100 years later a day will be about 4 ms longer. As the milliseconds added up, leap seconds were added to keep pace with the earth's rotation. This is imperceptible to us, but systems like GPS, stock trading, and space travel bank on accurate measures of time and can be thrown off.

"In the precise timekeeping world, a second is a lot," Dr. Agnew said.

Some other processes, like the slowed rotation of the earth's core, have been speeding up the earth's rotation time. After the previous ice age, a lot of ice melted from the northernmost and southernmost parts of the earth, causing the crust to rebound at the poles. This has also helped the earth to spin faster, so much so that scientists have mooted debates to understand if we need a negative leap second to correct for it.

The axis is shifting, too

Dr. Agnew published a paper in *Nature* in March showing a similar result: that

climate change and the resulting melting ice are slowing the earth's rotation and that that will actually delay the negative leap second.

Either way, both studies are proof climate change is exerting its effects over the entire planet by interfering with something as fundamental as how it spins around its axis.

Dr. Shahvandi and his collaborators published another recent paper in *Nature Geophysics* detailing the effects of melting polar ice on the earth's axis of rotation. Using observed data and predictions made by physics-informed neural networks, they found the melting of polar ice and glaciers is one phenomenon driving the earth's polar motion.

The location where the earth's axis of rotation intersects the crust is moving ever so slightly over time.

For people in low-lying coastal areas, rising sea levels because of melting ice lead to more devastating consequences than the mere wobble of the earth's axis or a gradually lengthening day.

Nevertheless, this is another example of how climate change is affecting our planet, pushing us towards a desperate need to curb emissions before the situation spins out of control.

(Rohini Subrahmanyam is a freelance journalist in Bengaluru. roh.subb@gmail.com)

THE GIST

When polar ice melts, the water flows to the equator, which makes the earth bulge out slightly. This increases the moment of inertia, and the rotation rate slows, increasing the time taken to complete a rotation and thus lengthening our day

Over the last two decades, climate's effects on sea levels around the equator have slowed the rate of the earth's rotation by around 1.3 milliseconds per century. If high emissions persist, this rate will change to 2.6 ms

These studies prove that climate change is interfering with something as fundamental as how the earth spins around its axis. Scientists found that the location where the earth's axis intersects the crust is moving ever so slightly over time

Impact of Climate Change on Earth's Rotation:

➔ Scientists have discovered that climate change is contributing to a slowing in the Earth's rotation.

Daily News Analysis

- This phenomenon is linked to the melting of polar ice caps, which has caused the Earth to spin slower.
- This slowing effect results in minuscule changes in the duration of a day, which, while not significantly affecting daily life, could impact technology reliant on precise timekeeping, such as computer networks and space travel.

Conservation of Angular Momentum:

- The phenomenon can be explained through conservation of angular momentum, a basic physics principle.
- When polar ice melts, water from the melt flows towards the equatorial regions, causing the Earth to bulge at the equator and increasing its moment of inertia.
- This results in a slower rotation rate and a slight increase in the time taken to complete one rotation, thus lengthening the day.

Recent Research Findings:

- Researchers analysed data from a 200-year period (1900-2100) and found that climate change has slowed the Earth's rotation by about 1.3 milliseconds per century over the last two decades.
- Projections indicate that if high emission scenarios persist, this rate of slowing could double to 2.6 milliseconds per century.
- This would make climate change the dominant factor in slowing the Earth's rotation, surpassing other influences.

Implications for Timekeeping:

- Despite the small magnitude of the change (milliseconds), it can impact accurate timekeeping, particularly for atomic clocks which are used for various technologies including GPS, stock trading, and space travel.
- The Earth's rotation has been gradually slowing due to lunar tidal friction, which already adds about 2 milliseconds per century to the Earth's day.
- This requires occasional leap seconds to keep atomic time in sync with Earth's rotation. Further alterations in the length of the day due to climate change could pose challenges for scientific research and precise timekeeping.

Effects on Earth's Axis:

- The melting of polar ice also affects the Earth's axis of rotation. Research indicates that melting ice is causing the Earth's axis to shift slightly over time.
- This shifting of the axis, combined with rising sea levels in coastal areas, underscores the broader impacts of climate change, which go beyond just slowing the Earth's rotation.

UPSC Prelims PYQ : 2019

Ques : Which of the following statements is/are correct about the deposits of 'methane hydrate'?

1. Global warming might trigger the release of methane gas from these deposits.
2. Large deposits of 'methane hydrate' are found in Arctic Tundra and under the sea floor.
3. Methane in atmosphere oxidizes to carbon dioxide after a decade or two.

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Ans: (d)

Page 10 : GS 2 : Indian Polity & Constitution - Historical underpinnings, evolution, features, amendments, significant provisions and basic structure

The Supreme Court has ruled that the Lieutenant Governor (LG) of Delhi can nominate 10 aldermen to the Municipal Corporation of Delhi (MCD) independently, without consulting the council of ministers.

➔ This decision has intensified tensions between the Union government, Delhi government, and the local government.

An overview of governance in Delhi

Why is there constant tension and friction between the Union government and the Delhi government? What did the 1989 Balakrishnan committee recommend? How has the Municipal Corporation of Delhi been involved in the power tussle? What can be done?

EXPLAINER

Rangarajan. R

The story so far:

The Supreme Court has ruled that the Lieutenant Governor (LG) of the National Capital Territory (NCT) of Delhi can nominate 10 aldermen to the Municipal Corporation of Delhi (MCD) on his own without the aid and advice of its council of ministers. This has added to the friction between the Union government, the Delhi government and the local government.

How did Delhi government evolve?

At the time of the commencement of the Constitution in 1950, Delhi was a Part C State. During the States reorganisation carried out in 1956, it was made a Union Territory to be governed by an administrator. The MCD was established in 1958, and a limited local government was established since 1966. Subsequently, as per the recommendations of the Balakrishnan committee (1989), the Constitution through the 69th amendment (1991) provided for a Legislative Assembly and council of ministers for the NCT of Delhi. However, the subjects of public order, police and land were excluded from the Delhi government; the Union government has control over them. The Government of NCT of Delhi Act, 1991 contains the detailed provisions relating to its legislature, executive and administration.

What are the issues?

Since 2015, the Union government led by the Bharatiya Janata Party (BJP) and the Delhi government led by Aam Aadmi Party (AAP) have been at loggerheads on various issues. While political differences play a pivotal role in such conflicts, there are also important legal angles. The judgments of the Supreme Court have resulted in amendments to the Government of NCT of Delhi Act that have



In rage: AAP leader and party supporters stage a protest against the Delhi LG on August 3. ANI

curtailed the powers of the elected government in Delhi. A brief summary of these developments in the last decade is provided in the above Table.

Apart from the issues between the Union and the Delhi government, the MCD with its elected representatives add another dimension to the problem as was witnessed in the recent unfortunate loss of lives due to electrocution and flooding in Delhi. The public at large witnessed the shifting of blame between elected representatives at all three levels.

What can be the way forward?

As part of its judgment in 2023, the Supreme Court mentioned that there is a triple chain of accountability in a democracy. The officials are accountable to the ministers; the council of ministers are collectively responsible to the legislative assembly; and the legislative assembly members are accountable to the

The Union versus Delhi

Since 2015, the Union government led by the BJP and the Delhi government led by AAP have been at loggerheads on various issues

Case / Amendment	Brief description	Implication
Govt of NCT of Delhi vs Union of India (UOI) (2016)	The Delhi High Court ruled that the LG of Delhi exercised complete control of all matters relating to the NCT of Delhi	It made the appointed LG the executive head, reducing the powers of the elected government of Delhi
Govt of NCT of Delhi vs UOI (2018)	On appeal against the Delhi HC judgment, the Supreme Court held that the LG was bound by the 'aid and advice' of the council of ministers headed by the Chief Minister of Delhi except on matters relating to public order, police and land	This restored the powers of the elected government of the NCT of Delhi in matters of day-to-day administration
Government of NCT of Delhi (Amendment) Act, 2021	It required the council of ministers to obtain the opinion of the LG before any executive action on matters specified by the LG	This amendment tilted the balance of power again in favour of the LG
Govt of NCT of Delhi vs UOI (2023)	A Constitution Bench of the Supreme Court in May 2023 had held that the Delhi assembly and government shall have legislative and executive powers over 'services' except in relation to public order, police and land	This restored the powers of the elected government of the NCT of Delhi in matters of day-to-day administration including postings and transfers
Government of NCT of Delhi (Amendment) Act, 2023	It created the National Capital Civil Service Authority for deciding on matters relating to 'services'. This authority will consist of the Chief Minister, the Chief Secretary and the Home Secretary of Delhi	This had the effect of again reducing the importance of the elected government and Chief Minister in decisions relating to 'services'

As part of its judgment in 2023, the Supreme Court mentioned that there is a triple chain of accountability in a democracy. The officials are accountable to the ministers; the council of ministers are responsible to the legislative assembly; and the legislative assembly members are accountable to the people

people. The constant tussle between various layers of government ruptures such a chain of accountability.

The NCT of Delhi is spread over 1,450 sq kms while the capital of our country 'New Delhi' that houses most of the central government offices and foreign embassies is around 50 sq kms. In the U.S., Washington DC which is the capital

district is spread only around 177 square kilometres. A similar approach may be considered where the area in 'New Delhi' of 50-100 square kilometres can be under the complete control of the Central government. The rest of the areas may be brought under the powers of the Delhi assembly. This would require a constitutional amendment after detailed deliberation and consensus. Nevertheless, under the existing set up, the spirit of the judgment of the Supreme Court in 2023 should be honoured.

This would ensure that the people of Delhi get responsible and responsive governance from all three layers of government irrespective of whichever party is in power.

Rangarajan. R is a former IAS officer and author of 'Polity Simplified'. He currently trains civil-service aspirants at 'Officers IAS Academy'. Views expressed are personal.

THE GIST

➔ The Supreme Court ruled that the Lieutenant Governor (LG) of the National Capital Territory (NCT) of Delhi can nominate 10 aldermen to the Municipal Corporation of Delhi (MCD) on his own without the aid and advice of its council of ministers.

➔ Since 2015, the Union government led by the Bharatiya Janata Party (BJP) and the Delhi government led by Aam Aadmi Party (AAP) have been at loggerheads on various issues.

➔ The judgments of the Supreme Court have resulted in amendments to the Government of NCT of Delhi Act that have curtailed the powers of the elected government in Delhi.

How did the Delhi government evolve?

➔ At the commencement of the Constitution in 1950, Delhi was classified as a Part C State.

Daily News Analysis

- ➔ Following the state reorganisation in 1956, it became a Union Territory governed by an administrator.
- ➔ The Municipal Corporation of Delhi (MCD) was established in 1958, and a limited local government was introduced in 1966.
- ➔ Based on the Balakrishnan Committee's recommendations in 1989, the 69th Constitutional Amendment in 1991 created a Legislative Assembly and council of ministers for the NCT of Delhi.
- ➔ However, the Union government retained control over public order, police, and land, excluding these subjects from the Delhi government's jurisdiction.

Why is there constant tension and friction between the Union government and the Delhi government?

- ➔ **Legal Disputes:** Legal battles have escalated tensions, particularly following Supreme Court judgments that have altered the balance of power between the elected Delhi government and the Lieutenant Governor (LG). For instance, recent rulings have clarified the LG's powers, allowing for unilateral actions that bypass the council of ministers.
- ➔ **Control Over Key Areas:** The Union government retains control over critical areas such as police, public order, and land, which limits the Delhi government's autonomy.
- ➔ **Administrative Confusion:** The presence of multiple layers of governance, including the MCD and other local bodies, complicates accountability and governance, leading to blame-shifting during crises, such as the recent incidents of electrocution and flooding.

What did the 1989 Balakrishnan committee recommend?

- ➔ **On Union Territory Status:** The Balakrishnan Committee recommended that Delhi must remain a Union Territory rather than achieving full statehood.
- ➔ **On Governance Structure:** The committee proposed a governance model that included an Administrator exercising powers based on the advice of the Council of Ministers, ensuring a balance of power while maintaining central oversight.
- ➔ **On Representation and Accountability:** The committee emphasized the need for a more effective representative democratic system to safeguard the rights of Delhi's growing population.

How has the Municipal Corporation of Delhi been involved in the power tussle?

- ➔ **Multiple Authorities:** The MCD operates under the Union government's control, adding complexity to the governance structure in Delhi. For example in public services and urban management.
- ➔ **Electoral Conflicts:** The MCD's elected representatives have often been caught in the crossfire of political disputes between the Union and Delhi governments, leading to inefficiencies and a lack of coherent governance. The recent tragedies in the city have highlighted the consequences of this blame-shifting.

Way Forward:

- ➔ **Revisiting Governance Structure:** A constitutional amendment could be considered to delineate the powers of the central government and the Delhi government more clearly. For instance, the area of New Delhi (50-100 square kilometres) could be under central control, while the rest could be governed by the Delhi Assembly.

Daily News Analysis

- ➡ **Implementation of triple chain accountability:** Implementing the spirit of the Supreme Court's 2023 judgment, which emphasized a triple chain of accountability, could help restore balance and ensure that all layers of government are accountable to the people.
- ➡ **Promoting Consensus-Based Governance:** Encouraging dialogue and consensus between the different layers of government could help mitigate conflicts and foster a more cooperative governance environment.

UPSC Mains PYQ : 2018

Ques : Whether the Supreme Court Judgement (July 2018) can settle the political tussle between the Lt. Governor and elected government of Delhi? Examine.

Location In News : St Martin's Island

The ousted Bangladeshi PM Sheikh Hasina claimed she could have stayed in power if she had given up St. Martin's Island and parts of the Bay of Bengal to the United States.



About St Martin's Island

- St. Martin's Island is located in the northeastern region of the Bay of Bengal, near the maritime boundary between Bangladesh and Myanmar.
- It lies about 9 kilometers south of the Cox's Bazar-Teknaf peninsula in Bangladesh.
- The island is approximately 7.3 km long and is mostly flat, with an elevation of about 3.6 meters above mean sea level.
- It is Bangladesh's only coral island and is surrounded by coral reefs that extend 10-15 km to the west-northwest of the island.
- **Historical Background:**
 - The island was originally part of the Teknaf peninsula but gradually submerged into the sea around 5,000 years ago.
 - It resurfaced approximately 450 years ago.
 - Arab merchants were among the first settlers in the 18th century. They named it "Jazira" and later "Narikel Jinjira" (Coconut Island).
 - In 1900, British India annexed the island, and it became known as St. Martin's Island, named after a Deputy Commissioner of Chittagong.

➔ **Strategic importance:**

- **Near the Strait of Malacca:** Close to one of the world's busiest maritime routes, making it strategically important for military oversight. It offers potential for monitoring maritime activities, including strategic interests of global powers.
- **Border with Myanmar:** Proximity to Myanmar adds significance in regional security dynamics.

➔ **Other significance for Bangladesh:**

- It is part of Bangladesh's EEZ, rich in marine resources like fish, oil, and gas. Also a key tourist destination.
- It is important for biodiversity, with coral reefs and diverse marine life.

UPSC Prelims PYQ : 2023

Ques : Consider the following pairs:

Area of conflict mentioned in news	:	Country where it is located
1. Donbas	:	Syria
2. Kachin	:	Ethiopia
3. Tigray	:	North Yemen

How many of the above pairs are correctly matched?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Ans: d)

Hints of the corporatisation of science research in India

During the inaugural address of the 107th Science Congress in Bengaluru in January 2020, Prime Minister Narendra Modi reflected on the government's take on how science should be conducted in India. It was conveyed to young researchers in his usual aphoristic manner of speaking: "innovate, patent, produce, prosper". By expressing it in a maxim, the Prime Minister was hinting at the birthing of a new policy on knowledge production under his leadership.

Over several years, the current ruling regime has been directing laboratories and other research centres to earn their revenue from external sources by marketing their expertise and investing the surplus to develop technologies for national missions. This policy position can be traced to the 'Dehradun Declaration' prepared by the directors of the Council of Scientific and Industrial Research labs in 2015, where it was decided to market patents as a means to self-finance research. In other words, this was a call for the corporatisation of science research – a process of converting any state-owned entity into a market commodity and being able to follow the business model to support itself, rather than relying on public support. Science institutes are now encouraged to develop research centres registered as Section 8 companies, wherein private companies or shareholders can invest money.

The ANRF and research

This line of thinking can be seen in the formulation of the Anusandhan National Research Foundation (ANRF). Established under the ANRF Act of 2023, this new mechanism is designed to fund research in the country and to improve linkages between research and development, academia and industry. The Finance Minister echoed the same in her July 23, 2024 Budget speech: "We will operationalise the ANRF for basic research and prototype development." The "prototype development" is a significant part of the innovation cycle to assess the marketability of a product – yet another hint of the government's overriding interest in funding the research that will cater to the market.



C.P. Rajendran

an Adjunct Professor at the National Institute of Advanced Studies, Bengaluru

In establishing the Anusandhan National Research Foundation and the way its funding proportion is designed, there are clear signals of the government's plan

Another giveaway is the way funding proportion is designed. The ANRF will receive ₹50,000 crore over five years, 72% of which is expected to be from the private sector. Judging from the way the resources are currently scheduled for the ANRF, it is clear that the government intends to reduce its role in funding the research and expects private entrepreneurship to pitch in a big way.

Even in the United States, where research and development has significantly outstripped government funding over the last decade, it is clustered mostly in IT and pharmaceuticals. The knowledge thus generated through research is considered a commodity to be marketed. The entrenchment of market-oriented perspectives comes from two sources, as discussed by Prabir Purkayastha in his book, *Knowledge as Commons*. What makes science different from the Renaissance period and after that is that science and technology are now more closely integrated than ever, and scientific advances can now end up as marketable products more rapidly. This transformation has also led to intellectual property rights allowing universities to sell the patents to private corporations, even if the research is publicly funded. The adoption of neoliberal economic policies across the globe has also accelerated the greater involvement of the private sector in funding science.

Signals despite the stated objective

The understated objective of the ANRF is to fund research in natural sciences, but in reality, there are sufficient hints that the government is planning to place the university research system subservient to what Ellen Meiksins Wood calls "the dictates of the capitalist market". The curiosity-driven research in natural sciences involves understanding and predicting natural phenomena based on empirical evidence and experimentation. The private sector cannot be expected to finance curiosity-driven science because it will not invest money unless the research finds some immediate application that maximises its profits. Interestingly, the same stringency in government funding is not shown while supporting the branches of the 'Indian Knowledge Systems', which are not part of

evidence-based science. Science is driven by the zeal to understand the world through scientific tools. This can be encouraged only by increasing the share of public funding. The research proposals in basic science need to be assessed based on the proposers' ability to acquire knowledge about a problem defined by conducting observations, experimentation and analyses. The application part of the result may not be apparent at all. A generally accepted working definition of basic scientific research reads: "the pursuit of knowledge to understand a natural process irrespective of the potential applications that might arise from such knowledge".

Country comparison

Although India is ranked among the top 10 by gross domestic product (GDP), the ratio of public funding for science research in India has been 0.6% to 0.7% of GDP for the last decade. A country such as South Korea, only a third the size of India and its population, spends about 2% to 3% of its GDP. While the private sector is encouraged to fund, the government must increase its basic science and non-profit research allocation. If that does not happen, the country will eventually witness the decline of curiosity-driven science in our universities, which could also undermine public trust in science when it gets dominantly mediated by private interests. Equally important is to nurture an ambience of free enquiry and maintain the financial and administrative autonomy of the institutes. This should have been amplified in the ANRF Act itself. As Niraja Gopal Jayal writes in the India Forum, although the heavy hand of the educational bureaucracy has always been hovering over public universities, constraining their autonomy, in recent times "the state intervention has become more manifestly political in a partisan way, and openly ideological within an ecosystem that attaches no value to academic freedom". It all boils down to a grand vision, but it does not evolve in a repressive society.

The views expressed are personal

GS Paper 03 : Science & technology : Achievements Of Indians In S&T

(UPSC CSE (M) GS-3 : 2021) What are the research and developmental achievements in applied biotechnology? How will these achievements help to uplift the poorer sections of the society? (200 words/10m)

Practice Question : Critically analyse the impact of the corporatization of scientific research in India, with specific reference to the Anusandhan National Research Foundation (ANRF) and its implications for curiosity-driven science. (250 w/15m)

Context :

- ➔ The article discusses India's shift towards market-driven scientific research, emphasising commercialization and reduced public funding.
- ➔ It examines the establishment of the Anusandhan National Research Foundation (ANRF) under the 2023 Act, concerns over declining curiosity-driven science, and the need for increased public funding and autonomy in research institutions.

Past trends of Research in India

- ➔ **Revenue streams:** The ruling regime has been directing laboratories and other research centres to earn their revenue from external sources by marketing their expertise and investing the surplus to develop technologies for national missions.
- ➔ **Dehradun Declaration:** Prepared by the directors of the Council of Scientific and Industrial Research labs in 2015, where it was decided to market patents as a means to self-finance research.
- ➔ **Corporatisation of science research:** A process of converting any state-owned entity into a market commodity and being able to follow the business model to support itself, rather than relying on public support.
- ➔ **Research infrastructure:** Science institutes are now encouraged to develop research centres registered as Section 8 companies, wherein private companies or shareholders can invest money.

The ANRF and research

- ➔ **Establishment under the ANRF Act of 2023:** This new mechanism is designed to fund research in the country and to improve linkages between research and development, academia and industry.
- ➔ **Operationalise the ANRF:** For basic research and prototype development. The "prototype development" is a significant part of the innovation cycle to assess the marketability of a product.
- ➔ **Funding mechanisms:** The ANRF will receive ₹50,000 crore over five years, 72% of which is expected to be from the private sector. The government intends to reduce its role in funding the research and expects private entrepreneurship to pitch in a big way.
- ➔ **United States experience:** Where research and development has significantly outstripped government funding over the last decade, it is clustered mostly in IT and pharmaceuticals. The knowledge thus generated through research is considered a commodity to be marketed.
- ➔ **Integration of Science and Technology:** What makes science different from the Renaissance period and after that is that science and technology are now more closely integrated than ever, and scientific advances can now end up as marketable products more rapidly.
- ➔ **Intellectual property rights:** This transformation has also led to intellectual property rights allowing universities to sell the patents to private corporations, even if the research is publicly funded.
- ➔ **Neo-Liberal Policies:** The adoption of neoliberal economic policies across the globe has also accelerated the greater involvement of the private sector in funding science.

Signals despite the stated objective

Daily News Analysis

- ➔ **The dictates of the capitalist market:** The curiosity-driven research in natural sciences involves understanding and predicting natural phenomena based on empirical evidence and experimentation.
- ➔ **Constraints from the private sector:** The private sector cannot be expected to finance curiosity-driven science because it will not invest money unless the research finds some immediate application that maximises its profits.
- ➔ **Government funding for 'Indian Knowledge Systems':** Which are not part of evidence-based science is less of a priority.
- ➔ **Funding gaps:** Through scientific tools and experimentation the share of public funding can be increased.
- ➔ **Experimentation and analyses:** The research proposals in basic science need to be assessed based on the proposers' ability to acquire knowledge about a problem defined by conducting observations, experimentation and analyses.
- ➔ **Comparison with Other Countries :** As of 2023, India's gross expenditure on R&D stands at approximately 0.64% of its GDP.
 - **United States:** The U.S. invests about 3.46% of its GDP in R&D
 - **South Korea:** South Korea leads with an impressive 4.8% of GDP allocated to R&D.
 - **Germany:** Germany's R&D spending is around 3.1% of GDP.
 - **China:** China's investment in R&D is approximately 2.4% of GDP.
 - **Taiwan:** Taiwan also invests around 3.77% of its GDP in R&D..

Conclusion

- ➔ **Government Funding:** While the private sector is encouraged to fund, the government must increase its basic science and non-profit research allocation.
- ➔ **Trust Surplus:** Countries can avoid the decline of curiosity-driven science in our universities through funding, as it can undermine public trust in science when it gets dominantly mediated by private interests.
- ➔ **Nurturing an ambience of free enquiry:** To maintain the financial and administrative autonomy of the institutes.
- ➔ **Bureaucratic support:** should be channelised to give more autonomy to public universities.

Finally, a collaborative effort by government, private sector and citizen will help to achieve a more scientific and just society.

India's Achievements Despite a Low GDP Investment in R&D:

- ➔ **High Production of PhDs:** Annually, India generates approximately 40,813 PhDs, ranking third globally after the United States and China.
- ➔ **Robust Research Output:** India's research output remains substantial, with over 300,000 publications in 2022, making it the third-largest producer of scientific publications globally.

Daily News Analysis

- ➔ **Growth in Patent Grants:** India has shown remarkable progress in intellectual property creation, securing 30,490 patents in 2022, placing it sixth globally.
- ➔ **Improvement in Global Rankings:** India has made significant strides in global innovation rankings and research quality. It improved its position on the Global Innovation Index (GII) from 81st place in 2015 to 40th in 2023.
 - India climbed to the 9th rank in the Nature Index 2023, surpassing countries like Australia and Switzerland.
- ➔ **Investment in Autonomous R&D Institutions:** A considerable portion of India's R&D funding is directed towards autonomous research laboratories.
 - The total investment in R&D reached approximately \$17.2 billion in 2020-21, with a significant allocation to key scientific agencies such as the Defence Research and Development Organisation (DRDO) and the Indian Council of Agricultural Research (ICAR).

What are the Initiatives to Foster R&D and Innovation in India?

- ➔ Sign Language AstroLab
- ➔ Council of Scientific and Industrial Research (CSIR)- National Physical Laboratory
- ➔ One Week - One Lab
- ➔ Science and Heritage Research Initiative
- ➔ Institute of Advanced Study in Science and Technology (IASST)
- ➔ National Initiative for Developing and Harnessing Innovations
- ➔ Mission on Advanced and High-Impact Research

Indian Ocean Rim Association

IORA is an inter-governmental organisation which was established on 7 March 1997.



- It was formerly known as the Indian Ocean Rim Initiative and the Indian Ocean Rim Association for Regional Cooperation (IOR-ARC).
- The IORA Secretariat is based in Mauritius. It became an observer to the UN General Assembly and the African Union in 2015.
- **Members** – It has 23 Member States and 11 Dialogue Partners.

- ➔ China is a dialogue partner in the IORA.

Members of IORA

- ➔ Membership is open to all sovereign states of the Indian Ocean Rim willing to subscribe to the principles and objectives of the Charter.
- ➔ **Current 23 Member States:**
 - Australia, Bangladesh, Comoros, France/Reunion, India, Indonesia, Iran, Kenya, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Oman, Seychelles, Singapore, Somalia, South Africa, Sri Lanka, Tanzania, Thailand, United Arab Emirates and Yemen.
- ➔ **Dialogue Partners:**
 - China, Egypt, Germany, Italy, Japan, Republic of Korea, Russia, Turkey, the United Kingdom and the United States of America.
- ➔ **Specialized Agencies:**
 - The Regional Centre for Science and Technology Transfer (RCSTT) based in Tehran, Iran.
 - The Fisheries Support Unit (FSU) based in Muscat, Oman.
- ➔ **Two Observers:**
 - The Indian Ocean Research Group (IORG)
 - The Western Indian Ocean Marine Science Association (WIOMSA)

Objectives

- ➔ To promote sustainable growth and balanced development of the region;
- ➔ To focus on those areas of economic cooperation which provide maximum opportunities for development, shared interest and mutual benefits;
- ➔ To promote liberalisation, remove impediments and lower barriers towards a freer and enhanced flow of goods, services, investment, and technology within the Indian Ocean rim.

Six priority pillars of IORA

Areas of Cooperation: Priority Areas



The Focus Areas of the Indian Ocean Rim Association

- ▶ **Blue Economy:** On the basis of the strategic location of the Indian Ocean region, IORA has emphasized on growing the Blue Economy in a sustainable, inclusive and people centered manner.
 - The IORA Secretariat has identified the following six priority pillars in the blue economy:
 - Fisheries and Aquaculture
 - Renewable Ocean Energy
 - Seaports and Shipping
 - Offshore Hydrocarbons and Seabed Minerals
 - Marine Biotechnology, Research and Development
- ▶ **Tourism**
 - Women's Economic Empowerment: IORA is committed to gender equality and women's economic empowerment.
 - IORA established Women's Economic Empowerment as a special area of focus at the 13th Council of Ministers Meeting in Perth, Australia on 1 November 2013.
 - On International Women's Day 2022, IORA released the IORA Gender Pledge.

Flagship Projects of IORA

Daily News Analysis

- ➔ **Indian Ocean Dialogue (IOD):** IOD is established in its role as a stand-alone Track 1.5 discussion (informal dialogue of top level political decision makers), encouraging an open and free flowing dialogue by key representatives of IORA Member states such as scholars, experts, analysts, and policy makers from governments, think tanks and civil societies on a number of crucial strategic issues of the Indian Ocean Region.
- ➔ **Somalia-Yemen Development Program:** It brought together experts and officials with a view to promote the sharing of knowledge and best practices of IORA Member States to enhance the capacity for human development in Somalia/Yemen.
- ➔ **The IORA Sustainable Development Program (ISDP):** The ISDP was introduced in 2014 dedicated for the LDCs that require assistance and support to conduct projects, and with the main purpose to promote sharing experiences and best practices among IORA Member States.
- ➔ **The IORA-Nelson Mandela Be the Legacy Internship Programme:** It aims to create a strong and growing base of young people in the Indian Ocean Region that understand and support the need to safeguard an Indian Ocean that is safe, secure and develops sustainably.
- ➔ **IORA-UN Women Promoting Women's Economic Empowerment in the Indian Ocean Rim Project:** IORA has collaborated with UN Women to strengthen research on women's economic empowerment, and promote the Women's Empowerment Principles in the region, supported by the Australian Department of Foreign Affairs and Trade.

Significance of IORA

- ➔ The IOR has always made significant contributions to the world economy.
 - ➔ The region is home to 35% of the world's population and also accounts for 19% of total gross domestic product.
 - ➔ Moreover, 80% of seaborne trade uses routes through the Indian Ocean.
 - ➔ Furthermore, 80% of seaborne oil trade and 100,000 commercial vessels depend on this route every year.
-