# Topics - MINDS MAPS included (Daily current affairs 14th & 13th December 2024

SAURABH PANDEY
CSE
PROFESSION HOUSENESS
HOM BANCETTO FIRE BELLIANCE

- Global Drowning Prevention Report
- Understanding the Constitution as a Commons
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- Mains



By saurabh Pandey



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# 30 people drowned per hour in 2021, says WHO

#### Zubeda Hamid

GENEVA

The World Health Organization (WHO) published its first-ever global status report on drowning prevention on Friday.

The report, released at an event in Geneva, reveals that three lakh people died by drowning in 2021 around the world (an estimated 30 every hour).

Close to 92% of such deaths took place in lowand middle-income countries, disproportionately affecting the poor and marginalised. The WHO's South-East Asia Region (which includes India) saw 83,000 deaths, or 28% of the global burden.

WHO Director-General Tedros Adhanom Ghebreyesus, via video conference, said the report provided a snapshot of the global burden of drowning. Countries could use the report to raise awareness, guide implementation strategies and track progress on drowning pre-



**Lurking danger:** Unmindful of the risk and warning board, people playing in the sea in Visakhapatnam. K.R. DEEPAK

vention, he said.

Compiled with the participation of 139 countries including India - the report found that while drowning deaths declined 38% since 2000, the progress had been uneven and the pace slow. The WHO's European Region, for instance, saw a 68% drop, while the South-East Asia Region saw a decline of 48%.

#### Children at risk

Primarily at risk are children and young people. Children aged under five accounted for the single largest share of drowning deaths (24%), with a further 19% of deaths among children aged five to 14, and 14% among young people aged 15 to 29.

The report notes that globally, drowning is the fourth leading cause of death for children in the age group of one-four and the third leading cause of death for children aged five to 14.

Even these staggering numbers however, are an underestimate, notes Caroline Lukaszyk, technical officer, WHO, as the report does not capture deaths by drowning owing to natural disasters such as flooding, and those that occur on water transport, primarily due to a lack of accurate data. With vulnerability to flooding increasing due to climate change - and 75% of flooding deaths known to be due to drowning this is a priority on the drowning prevention agenda, she says.

#### Training crucial

The report also states that while encouragingly, the WHO's evidence-based drowning prevention interventions are being implemented in many countries, the implementation is to varying degrees. For instance, only 33% of countries offer national programmes to train bystanders in safe rescue and resuscitation, and just 22% integrate swimming and water safety training into their school curriculum. Ouality data collection also remains a challenge.

More than 7.2 million people, mainly children, could die due to this "silent killer" by the year 2050 if current trends continue. Yet almost all drowning deaths are preventable, the report states, highlighting that political will and investment in drowning prevention are critical to save lives. Providing day care for pre-school children and teaching school students basic swimming skills could help protect millions of lives, it says.

Developed in response to a member-state request made through a World Health Assembly Resolution 76.18 (2023) and funded by Bloomberg Philanthropies, the report underscores that drowning is a complex health issue that requires the involvement of multiple sectors to address the broad range of risk factors. Legislation, even when it exists, is often out of step with the scale of the challenge, it says.



# **Topic** → **Global Drowning Prevention Report**



#### **Key Findings**

**Global Impact:** The WHO's first global status report on drowning prevention reveals that 300,000 people drowned in 2021, equating to approximately 30 every hour.

Regional Disparities: A staggering 92% of drowning deaths occurred in low- and middle-income countries. The South-East Asia Region, including India, accounted for 83,000 deaths (28% of the global total).

**Vulnerable Populations:** Children are disproportionately affected, with those under five representing 24% of drowning deaths, and 19% among children aged five to 14.

**Trends Over Time:** Drowning deaths have declined by 38% since 2000. However, progress is uneven; the European Region saw a 68% drop, while South-East Asia experienced a 48% decline.

**Underreporting Issues:** Many drowning deaths are underreported, especially those related to natural disasters and water transport, issues exacerbated by climate change.



Preventive Measures: Only 33% of countries have national programs for bystander training in rescue and resuscitation, and just 22% include swimming and water safety in school curricula.

Future Projections: If current trends persist, over 7.2 million people, mainly children, could die from drowning by 2050, highlighting the urgent need for political will and investment in prevention strategies.

#### **Summary**

The WHO's report underscores the global drowning crisis, with a significant impact on children in low-income regions, and calls for immediate action to implement effective prevention strategies

# Wounding the spirit of the Constitution of India



# constitutional court, the Allahabad High Court. Distancing ourselves would be a disservice

We have witnessed a sitting judge brazenly challenge the spirit and letter of the Constitution of India, in a speech that is nothing but a dog whistle that guarantees impunity to the mobs that will act on his words and views — and have been acting on words such as his emanating from the seats of power. The venom that Justice Shekhar Kumar Yadav, judge of the Allahabad High Court, spewed on the precincts of the court, has been widely reported in the media. Members of Parliament in the Opposition have initiated an impeachment motion against the judge, the Supreme Court of India has called for a report, and concerned citizens have written to the Chief Iustice of India.

None of this, however, captures the sense of collective shock, dismay and grief that it is even possible for this level of public humiliation. violent, incendiary, genocidal street-talk to emerge from a seat of justice under the Constitution. For that is what it is. And it is really time to seek remedies against an incitement to violence of this nature as a part of our solemn affirmation as citizens who gave to ourselves this Constitution. The 'sludge' that was passed as learned judicial speech is an assault on the citizens of India and not an attack on Muslims or minorities or urban naxals or protesters or just any particular group that has become the latest target of mob violence/public incitement. This is not Justice Yadav's views on Muslims, nor is this a case of just one rotten apple. In distancing ourselves from his comments, we do profound disservice to our autonomous and independent determination of the terms on which the collective 'we' is constituted in this country called India that is Bharat.

Justice Yadav's speech is an act of wounding. It is a speech that inflicts deep harms on all of us: in terms of how we experience the life of the mind, knowledge, convivial living and spiritual



<u>Kalpana</u> Kannabiran

a sociologist based in Hyderabad

'We' the people

of India must

not read down

Yadav's speech

and allow it to

something that

inconsequential

Justice S.K.

pass as

which are not determined by narrow walls and fences of bigotry, and in terms of the injuries that religious bigotry inflicts on shifting targets – on people, our lived lives, our dwellings, our worksites, our neighbourhoods and our places of worship. We have also seen the disastrous effects of soft bigotry as a trigger to mob/state violence, especially in the case of places of worship.

Let us not read down busice Vaday's sneech

fulfilment in a shared space, the boundaries of

Let us not read down Justice Yadav's speech and allow it to pass as something that is inconsequential. It is not something that can be adequately answered by the High Court that offered the space and the possibility for this – a High Court that did not rise in one voice to condemn and censure a member of the Bench for speaking genocide and atrocity. This is a court that ought to have written to the Chief Justice of India condemning Justice Yadav's speech long before the Supreme Court demanded a report in response to the petitioning and the protests by citizens who took note of the speech and mobilised action given the exceedingly slow wheel of the law.

It calls for a different order of collective judicial accountability. Nor can this act be adequately redressed by subjecting it to the low, anodyne chiding that is whispered by the judicial fraternity alone within court halls that allow restricted entry. We have seen the consequences of dog whistles of this kind over the past decade and the irreparable harms they bring in their wake. We also know that mobilising around the Constitution and its core values together as ordinary citizens, elected citizens and judicial citizens, speaking a shared language across vernaculars and faiths, is the only way of effectively affirming our collective and individual human dignity and the unity and integrity of this country - India that is Bharat.

#### A commons

This writer has long argued that the Constitution of India, and our rights and responsibilities as citizens, take shape through a deep connection between the intellectual history of constitutionalism and a grounding of that history in our evolving present-futures. Neither constitutional interpretation nor the delineation of our rights need be shackled by narrow reference to precedents and prior judicial wisdom alone, since the spirit of the Constitution (and indeed the Constitution itself) is not judicial

property, but is a commons. It is urgent that we think of the Constitution-as-commons – that a shared ownership and shared understanding govern its use to further the common good which is set out in the Preamble and in the philosophy of civil disobedience of various hues. Satyagraha is our collective inheritance – Gandhi, B.R. Ambedkar, Maulana Azad, Jaipal Munda, Dakshayani Velayudhan, Anis Kidwai, A.K. Gopalan....

It is not just rulers but when people who sit on judicial seats speak the undisguised tongue of rulers and the mobs, disobedience is the constitutional route to recuperation. If norms of 'judicial propriety' have come undone, Justice S.K. Yaday of the Allahabad High Court has scripted its ruination. In the resulting crisis that 'judicial propriety' finds itself in, the only resurrection is through the grammar of civil disobedience. Inquiries, explanations, reports, and measured censure will amount to nothing. Impeachment is a good move, but is only symbolic; it is destined to fail when Justice Yadav's political masters have a brute majority in Parliament, unless of course we have an unprecedented and unlikely action by members of the ruling alliance standing with the Constitution.

#### The outlines of a response

It is of course a sad comment that S.K. Yadav, as a judge, has political masters. This alone should trigger some deep reflection and public discussion by citizen judges, since the barrier between judicial and political speech (and space) has been breached. Taking this further, in reinstating the dignity compass and rejecting public humiliation in judicial conduct and speech, we need to think through public and judicial action that will draw on the wellsprings of our inheritance of civil disobedience and satyagraha. We must craft tactical resistance by refusing to allow a person who speaks this language to judge our cases or judge with us. The 'We' that opens the Preamble to the Indian Constitution is not a 'we' that is a motley group of people identified randomly (with or without their consent) as Hindu.

consent as rindu.

The 'We' is a constitutionally constituted people. A non-denominational, plural, dizzyingly heterogeneous, and diverse beyond measure people who believe in the spirit of the Constitution and its core values.



# **Topic** → **Understanding the Constitution as a Commons**



The Constitution of India is not just a legal document; it's a living entity that reflects our collective aspirations and struggles. This writer has long argued that our rights and responsibilities as citizens are deeply intertwined with the intellectual history of constitutionalism. It's essential to recognize that the Constitution is a commons, a shared space where every citizen has a stake.

## The Intellectual History of Constitutionalism

The roots of constitutionalism in India are rich and complex. They draw from various philosophical traditions and historical contexts, shaping our understanding of governance and rights. This history is not static; it evolves as we navigate our present and future.

# The Evolution of Rights and Responsibilities

Our rights are not merely granted; they are earned through struggle and dialogue. The responsibilities that accompany these rights are equally vital, as they ensure that we engage with our Constitution meaningfully.

#### The Spirit of the Constitution

The spirit of the Constitution transcends judicial interpretations. It embodies the hopes and dreams of the people, urging us to think beyond precedents and past judicial wisdom.

#### The Concept of Commons in Constitutional Law

Viewing the Constitution as a commons invites us to share ownership and understanding. It's not just the domain of legal experts or judges; it belongs to all of us.

## **Shared Ownership of the Constitution**

SAURABH PANDEY

CSE

BUILDING HANGE TO LOW BRILLING

When we think of the Constitution as a commons, we acknowledge that its interpretation and application should serve the common good. This shared ownership fosters a sense of responsibility among citizens.

#### The Role of the Preamble

The Preamble of the Constitution sets the tone for this shared ownership. It outlines the values of justice, liberty, equality, and fraternity, guiding us in our collective journey.

#### **Civil Disobedience: A Historical Perspective**

Civil disobedience has been a powerful tool in our struggle for rights. It's a form of protest that challenges unjust laws and practices, rooted in the belief that the Constitution is a living document.

## Satyagraha and Its Legacy

Satyagraha, a term coined by Gandhi, embodies the philosophy of nonviolent resistance. It's a testament to our collective inheritance, reminding us that change is possible through peaceful means.

#### **Key Figures in the Movement**

Figures like B.R. Ambedkar, Maulana Azad, and Jaipal Munda have played pivotal roles in shaping our constitutional landscape. Their contributions remind us of the diverse voices that have fought for justice.

Recently, the norms of judicial propriety have come under scrutiny. The actions of Justice S.K. Yadav of the Allahabad High Court have raised questions about the integrity of our judicial system.

If the judiciary loses its credibility, the very foundation of our constitutional democracy is at risk.

The Path Forward: Embracing Civil Disobedience

In times of crisis, civil disobedience emerges as a constitutional route to recuperation. It's a reminder that the Constitution is not just a set of rules but a living framework for justice.

#### The Role of Citizens in Constitutionalism

Citizens play a crucial role in upholding the Constitution. By engaging in civil disobedience, we assert our rights and responsibilities, ensuring that the Constitution serves the common good.

#### The Need for Collective Action

Collective action is essential in times of crisis. It's not enough to rely on institutions; we must come together as a community to uphold our constitutional values.

#### Conclusion

In conclusion, the Constitution of India is a commons that belongs to all of us. It's our collective responsibility to engage with it, interpret it, and ensure that it serves the common good. As we navigate the challenges of our time, let's remember the legacy of civil disobedience and the power of collective action.

# Swiss Shock: EFTA member lobs back India's MFN tax volley

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CSE
ENTITEMENTATION
FROM FASICS TO USC BRILLINGE

From Jan. 1, Indian entities in Switzerland face higher tax liabilities as country responds to Supreme Court ruling that voided tax treaty benefit

#### Vikas Dhoot NEW DELHI

n a development that could hurt India's investment climate and affect firms' international taxation math, Switzerland has decided to suspend the Most Favoured Nation (MFN) treatment for India under the two countries' 30-years old double-taxation avoidance agreement (DTAA), citing an October 2023 ruling against its validity by the Supreme Court on 11 petitions that were combined with a Nes-

tle plea.

A statement by Swiss authorities dated December II, said the MFN clause under the DTAA will no longer hold from January I, 2025, considering that India's apex court had said it does not get automatically triggered until notified under the Income Tax Act.

"On the basis of the Indian Supreme Court ruling, the Swiss competent
authority acknowledges
that its interpretation of
para. 5 of the Protocol to
the IN-CH DTA is not
shared by the Indian side.
In the absence of reciprocity, it therefore waives its
unilateral application with
effect from 1 January,
2025," a Swiss government
communique stated.

communique stated.
Terming this as a significant shift in bilateral treaty
dynamics, Nangia Andersen's tax partner Sandeep
Jhunjhunwala said this
would mean increased tax
liabilities for Indian enti-



ties operating in Switzerland and increases the complexities of navigating international tax treaties in an evolving landscape.

"Previously, Indian companies benefited from a reduced tax rate of 5% on dividends and other incomes, thanks to Switzerland's earlier application of MFN benefits. With the reversion to a 10% residual rate starting January 1, these firms face higher tax liabilities, reducing their competitiveness compared to businesses from countries still benefiting from MFN provisions," reckoned Ajay Srivastava, director of the Global Trade Research Initiative (GTRI).

"Beyond its immediate fiscal impact, this development reflects broader trends in international taxation, with countries like India increasingly asserting stricter interpretations of treaty provisions to protect domestic tax revenues," Mr. Jhunjhunwala noted, adding this underscores the need to align treaty partners on the interpretation and application of fax treaty clauses to

ensure predictability, equity, and stability in international tax framework.

Sameer Gupta, national tax leader at EY India, indicated that all may not be lost in this bilateral economic tangle. "As per the Court's decision, the MFN clause will only take effect once both countries issue notifications... once India provides the required notification, Switzerland can reactivate the treaty provision," he averred.

Mr. Srivastava, however, warned that this suspension not only brings tax challenges for Indian firms in sectors like financial services, pharmaceuticals, and IT, that have operations in Switzerland, but also introduces frictions with other trade and investment partners over the MFN clause interpretations that could hurt inbound and outbound investment flows. If disputes over reading MFN clauses persist. Indian businesses could face similar hurdles in other jurisdictions as well, he said.

"Proactive negotiations to clarify and harmonize interpretations of treaty provisions are essential to safeguard Indian firms' interests abroad. Additionally, India must ensure that its treaty frameworks reflect contemporary business realities, particularly in the digital and service sectors, to reduce tax uncertainties and promote global competitiveness;" Mr. Srivastava underlined.

#### **TOPIC** → Switzerland Suspends MFN Treatment for India



#### **Key Developments**

Suspension of MFN Treatment: Switzerland has halted the Most Favoured Nation (MFN) treatment for India under the 30-year-old double-taxation avoidance agreement (DTAA), effective from January 1, 2025.

Legal Context: This decision follows an October 2023 Supreme Court ruling in India, which questioned the validity of the MFN clause, stating it does not automatically trigger without notification under the Income Tax Act.

Impact on Indian Firms: Indian companies operating in Switzerland will face increased tax liabilities, with rates rising from a reduced 5% to a 10% residual rate on dividends and other incomes.

Bilateral Treaty Dynamics: The change signifies a major shift in bilateral treaty dynamics, highlighting India's stricter interpretations of international tax treaties to protect domestic revenues.

Need for Negotiations: Experts emphasize the importance of proactive negotiations to clarify treaty interpretations and safeguard Indian firms' interests abroad, particularly in sectors like financial services, pharmaceuticals, and IT.



**Potential Global Impact:** The suspension could lead to frictions with other trade partners and affect inbound and outbound investment flows, potentially creating hurdles in other jurisdictions.

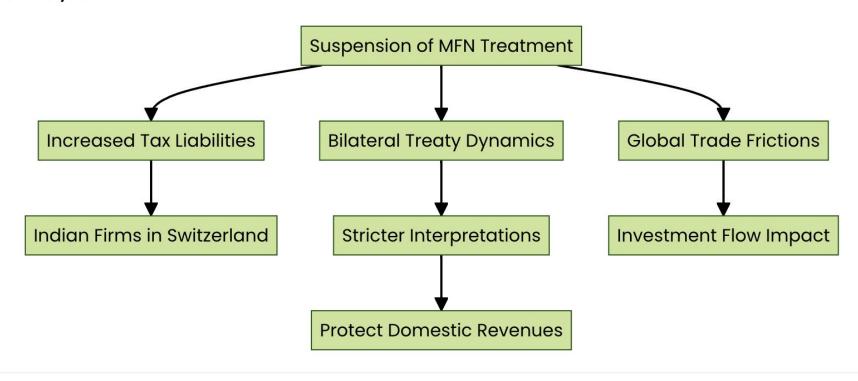
**Future Possibilities:** There is a possibility for India to reactivate the MFN clause if it issues the required notification, as indicated by Swiss authorities.

#### **Summary**

Switzerland's suspension of the MFN treatment for India under the DTAA could increase tax liabilities for Indian firms and complicate international tax relations.



#### **Impact Analysis:**



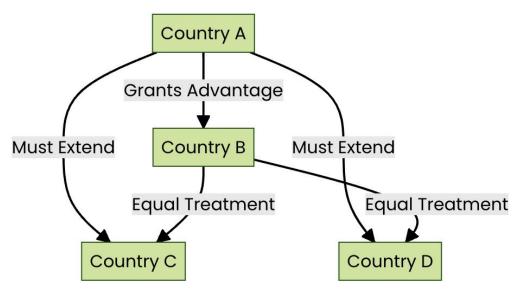
## **Most Favoured Nation (MFN) Status**



- Most Favoured Nation (MFN) status is a fundamental principle in trade policy.
- [ It ensures equal treatment for all trading partners.
- Under MFN, any trade advantage given to one nation must be extended to all nations with MFN status.
- This principle is widely used in international trade agreements.
- MFN status helps in promoting fair competition and reducing trade barriers.
- ## It is a crucial element of the World Trade Organization (WTO) agreements.
- MFN can lead to increased trade and economic cooperation among nations.



#### **MFN Status Flowchart:**



MFN TradePolicy InternationalTrade WTO EconomicCooperation

**1-liner summary:** Most Favoured Nation status is a trade principle ensuring equal treatment among trading partners to promote fair competition.

# **European Free Trade Association (EFTA)**



#### **Overview**

SEFTA stands for the European Free Trade Association, promoting free trade and economic integration among its member states.

The founding members include Switzerland, Norway, Iceland, and Liechtenstein.

EFTA operates independently of the European Union but maintains a close relationship through various agreements.

#### **Objectives and Activities**



Aims to enhance trade relations and economic cooperation among its members and with other countries.

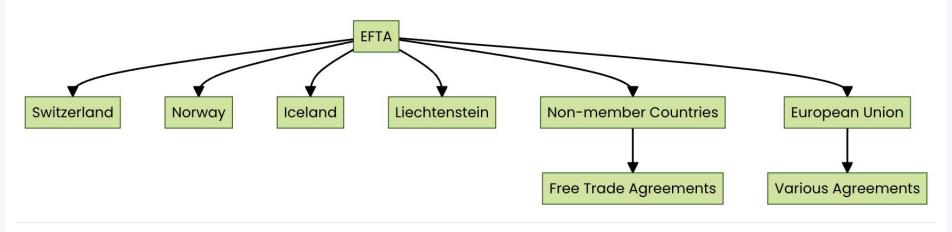
m Established free trade agreements with several non-member countries, expanding its global trade network.

Focuses on reducing trade barriers and fostering a competitive market environment.

Engages in dialogue and cooperation on issues like environmental protection and sustainable development



#### **EFTA's Trade Network:**





#### IR IN NEWS

- Second martial law impeachment vote looms for S. Korean President .
- Georgia's political crisis deepens as govt. set to name far-right President

# Lok Sabha passes Bill to amend the Disaster Management Act of 2005



#### The Hindu Bureau

NEW DELHI

The Lok Sabha on Thursday passed a Bill to strengthen the working of national and State disaster management authorities, with the Centre stressing that the legislation will help State governments deal with disasters better.

The House cleared the Disaster Management (Amendment) Bill, 2024 by a voice vote. Several amendments moved by the Opposition members were negated.

Pointing out that State governments had flagged several difficulties in implementing the Disaster Management Act of 2005, Union Minister Nityanand Rai said the new Bill would not only overcome them but also strengthen the disaster management system. The Bill seeks to bring clarity and convergence among stakeholders working in the field of disaster management.

"When a disaster hits, it hits the country as a



The new Bill seeks to bring clarity and convergence among stakeholders in the field of disaster management. THULASI KAKKAT

whole; this Bill will prepare the country to handle disasters better." he said.

Many Opposition members, however, said that the Disaster Management (Amendment) Bill, 2024 only talks about creation of a plethora of organisations. Saugata Roy of the Trinamool Congress alleged that the Modi government was not able to manage the pandemic properly and a large number of people died.

He said, "This Bill creates a plethora of organisations and has added a number of English terms".

Captain Viriato Fernandes of the Congress

said that while the members were talking about following a holistic approach to deal with disasters, the Bill seemed to have gone against that approach.

Another Congress member, G.K. Padavi, pointed out that climate change had not been included in the Bill and the word "compensation" had been replaced with "relief". "It (promotes) over centralisation," Mr. Padavi said.

Taking a dig at the Opposition, BJP member Arun Govil said disruptions in Parliament on a daily basis was a manmade disaster as it hurt Parliament's dignity.

# **Topic** → **Disaster Management (Amendment) Bill, 2024**



- When it comes to the subject of disaster management, it's imperative that we stay informed and engaged.
- The recent passage of the Disaster Management (Amendment) Bill, 2024 by the Lok Sabha has sparked a flurry of discussions.
- This legislation aims to bolster the disaster management framework in India, ostensibly improving how State governments respond to calamities.
- But amidst the optimism, there are voices of dissent questioning its efficacy and intent.

•

## **Key Features of the Bill**



The Disaster Management (Amendment) Bill, 2024 introduces several key features that are designed to enhance the operational landscape of disaster management in India. Here's a closer look:

**Strengthening State Authorities**: The Bill explicitly aims to empower State disaster management authorities, addressing the challenges

flagged by various State governments under the Disaster Management Act of 2005.

**Clarity and Convergence:** One of the primary objectives of this legislation is to bring about clarity and convergence among the myriad stakeholders involved in disaster management, ensuring a more coordinated approach during emergencies.

**Holistic Preparedness:** Union Minister Nityanand Rai emphasized that the Bill is crafted to enable a more robust response to disasters, asserting that "when a disaster hits, it hits the country as a whole

# **Opposition Concerns and Critiques**



As the Bill sailed through the Lok Sabha, it wasn't without its share of criticism. Several opposition members raised concerns that warrant careful examination:

**Over-centralization:** Critics, including Saugata Roy from the Trinamool Congress, argue that the Bill creates a "plethora of organizations" without addressing the fundamental issues that plague disaster management, especially in light of the pandemic.

Climate Change Neglect: Concerns were raised regarding the omission of climate change considerations within the Bill. G.K. Padavi from Congress pointed out that failing to include this critical factor undermines the holistic approach needed in disaster management.

**Terminology Changes:** The shift from "compensation" to "relief" was another contentious point, with opposition members claiming it reflects a lack of seriousness toward the needs of disaster-affected populations.

# **Future Implications of the Disaster Management (Amendment) Bill**



As we turn our gaze to the future, the implications of the Disaster Management (Amendment) Bill, 2024 are both vast and complex. Here are some prospective effects and considerations that arise from this legislation:

**Enhanced Preparedness:** With a reinforced framework, State governments are expected to better anticipate and respond to disasters. This could lead to improved resources and training for first responders.

Collaboration among Stakeholders: The emphasis on clarity and convergence could foster stronger collaboration among various stakeholders, including government bodies, NGOs, and community groups. This synergy is crucial in times of crisis.

**Potential for Bureaucratic Overload:** While the intention is to streamline disaster management, critics caution that the creation of numerous organizations might lead to bureaucratic inefficiencies. The risk of overlapping roles and responsibilities could hamper timely responses.

#### Conclusion



The passage of the Disaster Management (Amendment) Bill, 2024 marks a significant moment in India's approach to handling disasters. While the Bill aims to strengthen the mechanisms for disaster response, it also opens the floor for critical discussions regarding its implementation and potential pitfalls. As the country navigates this new legislative landscape, continuous engagement with stakeholders and critics will be essential to ensure that the Bill achieves its intended goals without compromising on the needs of the citizens it aims to protect

# What is Disease X and why the world should prepare for it

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ENHIBITIOTICIDESE
FROM MASKS TO TOPO BRILLIANCE

COVID-19 is regarded as the first instance of a real Disease X. When SARS-CoV-2 emerged as an unknown pathogen causing a global pandemic, it exemplified the scenario that Disease X was meant to represent — an unpredictable, novel threat requiring rapid global response and adaptation

#### C. Aravinda

#### The story so far

he recent outbreak reported in the first week of December 2024 in the Democratic Republic of Congo, which has claimed over 400 lives and remains unclassified, has raised concerns that it could be an instance of Disease X. This unsettling event has reignited discussions about Disease X. Disease X is not an actual but a hypothetical disease. The World Health Organization (WHO) coined the term in 2018 to describe an unknown pathogen that could potentially unleash a devastating epidemic or pandemic. It was conceptualised by the WHO to prepare for future outbreaks that are difficult to predict or identify. While investigations continue to determine the cause in Congo, the outbreak underscores the importance of Disease X.

# WHO's priority list of pathogens? COVID-19 is widely regarded as the first instance of a real Disease X after the WHO introduced the concept in 2018. When SARS-GoV-2 emerged as an unknown pathogen causing a global pandemic, it exemplified the scenario that Disease X was meant to represent – an unpredictable, novel threat requiring rapid global response and adaptation. The concept of Disease X traces its origins epidemic of 2014-2016, which resulted in over 11,000 deaths and revealed similicant gas in global epidemic.

preparedness. After the outbreak, the

WHO brought together scientists and

public health experts to address how

future outbreaks of similar scale could be prevented. The WHO's priority list of pathogens is a strategic tool published in 2018 that is designed to focus global attention and resources on the most serious infectious disease threats. This list identifies diseases that have epidemic or pandemic potential for which there are insufficient or no medical countermeasures such as vaccines or treatments. The need for such a list arises from the urgency to guide research and development, allocate funding, and enhance preparedness. It helps policymakers, researchers, and health organisations prioritise efforts toward controlling the diseases. The current list (not exhaustive ) includes Ebola virus disease, Marburg virus disease, Lassa fever, Nipah virus, Rift

#### therapeutic options.

What is Disease X?
Disease X is not a specific illness but a
placeholder for an unpredictable and

Valley fever, Crimean-Congo

haemorrhagic fever, Zika virus, and

Disease X. Each of these pathogens has

and the lack of adequate preventive or

mortality rates, potential for rapid spread,

been flagged due to factors like high



Swab samples being taken for a COVID-19 test. File THE HINDU

as yet:undiscovered pathogen capable of sparking a global health crisis. The WHO included it in the Blueprint for Priority Diseases in 2018 to focus on the risks of emerging diseases that science has yet to encounter. The term sits at the common the term sits at the four popularised by Donald Rumsfelds matrix: "known unknowns" (firetast we are aware of but cannot fully understand) and "unknown unknowns" (firetast we are not aware of and understand). Disease X embodies both, as it acknowledges the likelihood of a future pandemic without specifying when, where, or how it might

The potential culprits behind Disease X are varied. It originates from Pathogen X, which could be a virus, a bacterium, a parasite, fungi, helminths, or even a prion - a misfolded protein capable of causing severe neurological diseases. Historical data supports this uncertainty. Since 1940 (from where authentic records are available), researchers have identified more than 300 emerging infectious diseases, about 70% of which have zoonotic origins, meaning they are transmitted from animals to humans. This process, known as zoonotic spillover, is often linked to human encroachment on wildlife habitats, deforestation, and the intensification of agriculture. Meanwhile, the growing risks of antimicrobial resistance, bioterrorism, and accidental lab leaks add further lavers of unpredictability.

#### Patterns in emerging diseases

While the exact nature of Disease X remains unknown, epidemiological patterns provide critical insights into how new diseases emerge and spread. The emergence of viruses such as HIV, SARS, MERS, and Ebola was closely linked to ecological disruptions caused by human activity. Deforestation, urbanisation, and climate change have pushed humans and wildlife into Osore contact, increasing the

The interconnectedness of our world makes it easier for localised outbreaks to escalate into pandemics. While epidemiology cannot predict the exact moment or source of Disease X, it can help identify high-risk regions and behaviours

el likelihood of pathogen transmission. Epidemiologist estimate that over 1.7 million undiscovered viruses exist in wildlife, with hundreds of thousands potentially capable of infecting humans. The frequency of novel outbreaks has also increased significantly since the mid-20th carrivant and combination of environmental, demographic, and global or environmental, demographic, and global

Regions with high biodiversity and indequate healthcare systems, like the Congo Basin, are particularly vulnerable. The interconnectedness of our world, with frequent international travel and trade, makes it easier for localised outbreaks to escalate into pandemics, as seen with COVID-19. While epidemiology cannot predict the exact moment or source of Disease X, it can help identify high-risk regions and behaviours that increase the likelihood of its emergence.

#### Challenges of predicting Disease X Forecasting the next Disease X is

rotects unit unit enterpresses A san de dauming, as its enclarite elegrat do na dauming, as its enclarite elegrat. Zonontic diseases are the most likely source, given their history of driving major epidemics. However, other scenarios, such as pathogens mutating to evade treatment, laboratory mishaps, or ediberate biological attacks, cannot be ruled out. Climate change is also reshaping disease transmission dynamics, reshaping disease transmission dynamics, reshaping disease transmission dynamics, while pushing pathogens to adapt to new while pushing pathogens to adapt to new The sheer number of potential pathogens adds to the complexity. Scientists estimate that only a fraction of viruses capable of infecting humans have been identified, leaving a vast pool of unknown threats. Genomic sequencing and artificial intelligence are beginning to play an important role in narrowing this vest fold of proceibilities have seen with

hosts and environments.

unknown threats. Genomic sequencing and artificial intelligence are beginning to play an important role in narrowing this vast field of possibilities, but even with these tools, predicting the exact origin, timing, and behaviour of Disease X remains out of reach. What is certain, however, is that the conditions that gave rise to pandemics like COVID-19 and SARS continue to exist, making the emergence of Disease X a question of when, not if or plays a constant of the condition o

for robust surveillance systems to detect new outbreaks early. Advances in genomic sequencing, artificial intelligence, and read-time data sharing are essential tools for developing diagnostics, thereparties, and vaccines. Strengthening healthcare infrastructure, particularly in low and indide-income countries, is also crucial. Organizations like the Coattion for Epidemic. Preparedness innovations (Capari' platforms that care low dispersion of the coate platforms that can be adapted to target unknown diseases within 100 days of their identification.

#### Need for global collaboration

Fighting Disease X will require an unprecedented level of international cooperation. The WHO's ongoing efforts, such as its list of priority pathogens and the proposed Pandemic Treaty, aim to foster a unified global response to health emergencies. These initiatives recognise and that fragmented efforts will be insufficient to counter a threat as elusive as Disease X. Governments must work together to share data, pool resources, and ensure equitable access the

diagnostics, treatments, and vaccines. The outbreak in the DRC serves as a sobering reminder of the risks the world faces. Disease X is no longer a distant hypothetical but an urgent call to action. By strengthening public health systems, investing in research and innovation, and fostering global solidarity, the world can prepare for the unpredictable and safeguard future generations from the devastating consequences of the next pandemic. Frameworks like the Nagova Protocol, which ensure equitable sharing of benefits from genetic resources, could be expanded to include biological materials like pathogens. It would promote global collaboration, ensuring fair access to research and medical countermeasures during outbreaks, A novel disease anywhere is a threat to

everyone.
(Dr. C. Aravinda is an academic and public health physician. The views expressed are personal.
aravindaaiimsir10@hotmail.com)

# **Topic - Disease X:**



#### **Understanding Disease X**

Note that could potentially cause a future epidemic or pandemic.

Utilized by the World Health Organization (WHO), it represents unknown pathogens that may emerge and pose a global health threat.

The term underscores the necessity for preparedness and research into potential diseases that have not yet been identified.

#### Importance of Disease X

Surveillance and rapid response systems are crucial in public health to address Disease X.

📈 It serves as a reminder of the unpredictability of infectious diseases and the potential for new outbreaks.

The concept encourages investment in vaccine development and healthcare infrastructure to combat future threats.

⚠ Disease X highlights the importance of global collaboration in addressing emerging health challenges.

#### **Summary**

Disease X symbolizes a potential future infectious disease that could lead to a global health crisis, emphasizing the need for preparedness and research.

#### Beijing's war against air pollution

Beijing in 2015 had pollution levels similar to those in Delhi today. However, through coordinated effort over several years, Beijing reduced its pollution by one-third between 2013 and 2017; by learning from Beijing's approach, Delhi can implement effective strategies to tackle its air pollution problem

#### EXPLAINER

Rohit Azad Shouvik Chakraborty

eijing, with a yearly average air quality index (AQI) of 144, was as polluted in 2015 as Delhi is today (Delhi's average is 155 for 2024). But in the interim, Beijing has managed to cut its pollution level by one-third with the most significant fall spanning between 2013 and 2017 (Chart 1). To be sure, Beijing's pollution control programme dates back to 1998 which laid the foundation for this aggressive last phase of the programme, which was termed a "war against air pollution"

#### Why discuss Beijing in the context of

Beijing is the capital of an emerging economy, as is Delhi. So, if Beijing could manage what it did at its stage of development, Delhi could and needs to. as well.

There are many similarities between Beijing in 2013 and Delhi today. Chart 2 compares the sources of pollution for the two cities

For Delhi, we have used the winter months' data because that is the most updated emission inventory available. Moreover, much like Beijing, the regional contribution to pollutants by neighbouring areas/States of the national capital region (NCR) is also high, especially during the winter months While local emissions need to be controlled, without a concerted collective effort by the entire NCR region, just as Beijing achieved, it would be difficult to win this battle against air pollution.

#### What did Beijing do?

With rapid economic growth in Beijing. the ambient concentration of pollutants increased rapidly by the late 1990s. By 2017, Beijing's energy consumption had grown by 74% compared to 1998. Unfortunately, a rapid increase in urbanisation and energy consumption meant higher emissions of pollutants. Things were particularly made worse because the heating in Beijing's residential properties was heavily coal-dependent.

Beijing's 20-year anti-pollution programme can be divided into three phases - 1998-2008: 2009-12: 2013-17. One common theme that ran through the entire effort was not shock-and-awe but a careful and slowly built-up plan with people's participation, which was run autonomously by the local government of Beijing.

Sources of pollution in Beijing were broadly identified as energy structures and coal combustion (contributing 22% to PM2.5), transportation structures (31%), and construction and industrial structures (33%).

For the first source, three steps were taken - ultra-low emission renovation and clean energy alternatives in power plants, renovation of coal-fired boilers, and elimination of civil bulk coal consumption used for residential heating.

For transportation infrastructure, the government first retrofitted cars and public service vehicles with diesel particulate filters (DPF) and gradually tightened emission standards. Then it went for scrapping, through subsidies instead of decree, of 'yellow-labeled' vehicles (heavy pollutant-emitting vehicles). Subway and bus infrastructure was overhauled and expanded at a rapid rate, along with optimising the urban

As for the industrial and construction activities, tightening environmental requirements, intensifying end-of-pipe

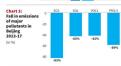
#### Turning the tide on pollution

ijing's battle against air pollution provides a useful framework for Delhi. With improved transportation, stricter regulations, and regional collaboration. Delhi can follow a similar path to cleaner air



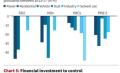


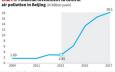




# destrians walk along the Kartavya Path engulfed in thick smog, near India Gate in New Delhi on November 18 AFP







loggerheads to control other sources

which originate in these regions. Such a

step may work in their collective interests

Last but not least, the people of Delhi

need to fight for the right to clean air and

hold the government accountable instead

of normalising poor AQIs as being better

than severe ones. Prolonged exposure to

pollutants, even in the poor AOI zone (for

dangerous as a short period of severe AQI

Unfortunately, it is not the lack of ideas

but political will which is stopping Delhi

from acting. It is the same reel playing out

every year. Air in the very harmful zone

for weeks with schools closing down, the

young and the elderly gasping for breath

through the day is the new normal in the

winter months in Delhi. And what does

the government do? The Centre blames

the State and vice versa while they have

both been in office for a decade. Neither

Schools, offices, and individuals look for

solutions in the form of air purifiers, bu

private protection for a public bad is by

definition exclusivist, with especially the

disadvantaged, who contribute the least

to the problem, getting a raw deal. Delhi

that the government, both at the Centre

lawaharlal Nehru University, New Delhi

and Shouvik Chakraborty is a Research

Assistant Professor at the Political Economy

and the State, listened and acted.

Economics Studies and Planning,

Research Institute, Amherst, U.S.

deserves a better response. It is high time

Robit Azad is a faculty at the Centre for

of them is serious or even vaguely

interested in solving the problem

a larger part of the year), may be as

in October and November every year.

This change in attitude itself may go a

long way in building pressure on the

iource: Data on Beijing has been taken from "UN Erwironment 2019 - A Review of 20 Years' Air Pollution Control in Beijing," United Nations Environment Programme, Nairobi, Kenya, and, or Delhi, from a report triled "Boal-Time Source Apportionment and Forecasting for Advance Air Pollution Management in Delhi' submitted to the Delhi pollution control committee

#### (EOP) treatment, eliminating obsolete industrial capacity, creating a green construction management model. efficient washing facilities, and implementing video monitoring with penal action against violators of

construction sites were some of the steps The last leg of the plan (2013-17) especially focused on the need for regional cooperation, with five adjoining provinces around Beijing coming together to chalk out a collective plan for reducing ambient pollution in the region. This cooperation had a remarkable effect in

#### reducing the level of pollution. What did Beijing achieve? And how? As a result of this meticulously planned strategy at multiple levels, sulphur dioxide, nitrogen oxide, volatile organic compounds (VOCs), and PM2.5, the four major pollutants targeted under the policy, fell by 83%, 43%, 42% and 59% respectively between 2013-17 (Chart 3). Since most activities produce multiple pollutants, albeit to differing degrees

associated pollutants. Chart 4 shows how by targeting each source, multiple pollutants were controlled.

The single most important factor in Beijing achieving its goal, apart from planning to the last detail, was the financial investment that the government committed to

Chart 5 shows a whonning six-time jump in investment within just four years. All the steps enumerated above required heavy investment and the government did not shy away from making and

#### What can Delhi learn from the Beijing experience? There are ideas galore on controlling

pollution, and Beijing is a perfect example to learn from. We list some here, there are Firstly, since private transport is the

biggest contributor to local pollution, an efficient and comfortable bus-metro integrated transport system needs to be in place. Delhi's DTC bus fleet is not only old but also grossly inadequate for a population of this city's size. The metro is an excellent means of transport but is quite expensive, with almost zero last-mile connectivity provided by the State. Old vehicles need to be scrapped at the earliest through a well-thought-out subsidy-for-scrap programme, instead of banning them. Exclusive cycling and walking lanes should be built throughout the city. Other ideas, such as cross-subsidisation through affordable public transport and expensive private transport (cars and motorcycles) using congestion or high parking charges, as well as separate fuel costs for the two targeting a source meant reducing all the modes of transport, could be experimented with. An urban layout is needed where places of work and

> the need for long-distance travel. Secondly, Delhi's electricity is still supplied primarily through coal fired plants. The energy system needs a serious overhaul both from the sides of supply and demand. Subsiding solar roof tops and connecting it to the grid with electricity bill discounts could be one

residence are brought closer, alleviating

such step in this regard. Thirdly, much like the Beijing plan, Delhi needs to coordinate with neighbouring regions, instead of being at

#### THE GIST

Beijing's approach to air pollution involved a long-term coordinated effort with a focus on regional cooperation and multiple sectors.

Key measures included mproving transportation infrastructure retrofitting vehicles, scrapping old vehicles, and enhancing industrial regulations

Delhi can adopt similar strategies, focusing or integrated transport systems, regional collaboration, and stricter emission controls to combat its pollution crisis.



# Topic --



#### **Delhi's Path to Cleaner Air**

#### **Key Strategies for Pollution Control**

#### Integrated Transport System:

Delhi requires an efficient bus-metro transport system to minimize pollution from private vehicles.

The current DTC fleet is outdated and insufficient.



Constructing exclusive cycling and walking lanes can encourage sustainable transport options.

This reduces reliance on cars.

#### \*\* Renewable Energy Transition:

Shift energy supply from coal to renewable sources.

Subsidize solar rooftops and connect them to the grid.

#### Regional Coordination:

Collaborate with neighboring regions to tackle cross-border pollution sources.

This benefits all parties involved.



#### Public Awareness and Advocacy:



Citizens should advocate for their right to clean air.

Hold the government accountable for air quality issues.

# **Political Will:**

The main barrier to effective pollution control is the lack of political will.

Numerous ideas are available but not implemented.

# Accountability for Air Quality:

Continuous poor air quality, especially in winter, demands urgent government action.

Avoid blame-shifting between authorities.



# **Summary**



Delhi can learn from Beijing's pollution control strategies by:

Improving public transport.

Promoting renewable energy.

Fostering regional cooperation.

Encouraging public advocacy for clean air.



# Charge of the battery brigade





**Power struggle:** A salt sculpture is seen at the Salar de Uyuni, the world's largest salt flat, in Uyuni, southern Bolivia. In the heart of the 'lithium triangle,' located between Chile, Argentina, and Bolivia, a strategic battle is being fought to exploit this key metal in the energy transition. The first two are already major players, while Bolivia is stumbling to enter the global race. AFP

#### **Topic**→ **Salar de Uyuni: A Natural Wonder**



#### **Overview**

- Salar de Uyuni is the world's largest salt flat.
- Located in Uyuni, southern Bolivia.
- Composed mainly of salt crusts, serving as a significant natural resource.
- A popular tourist destination known for its unique landscape.
- puring the rainy season, the flat creates stunning mirror-like reflections.
- Home to various wildlife, including llamas and flamingos.
  Part of the Altiplano plateau, featuring high-altitude geography.

Summary: Salar de Uyuni is the largest salt flat in the world, located in southern Bolivia, known for its breathtaking landscapes and unique ecological features

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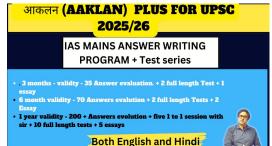
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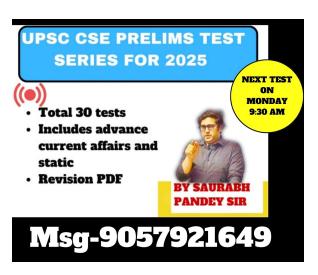


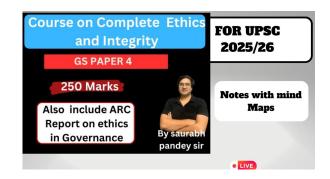
Test -10 scheduled on Monday - 9:30 am

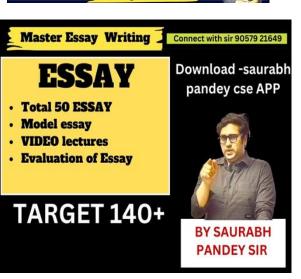












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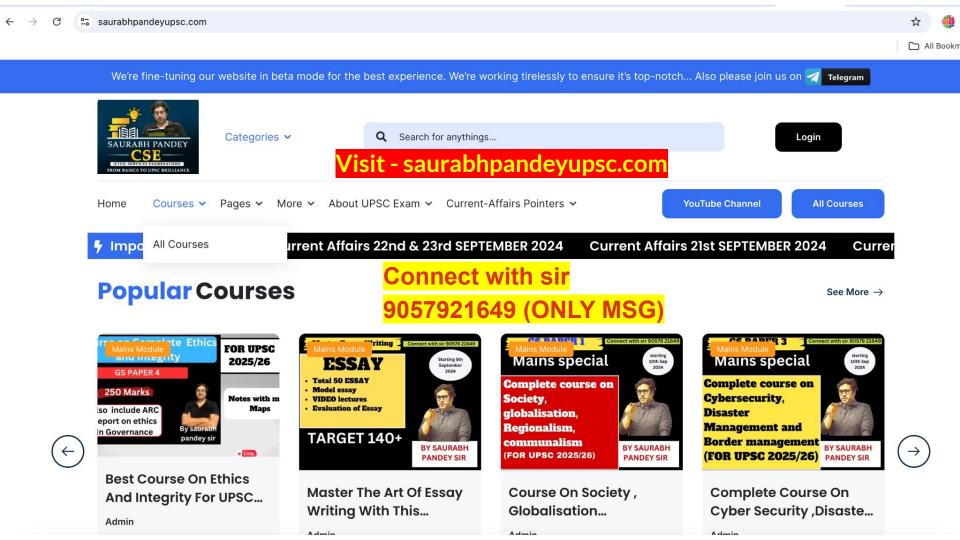
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Week -2 - International relations

Week -3 -Ethics and integrity

Week -4 - Ethics and integrity

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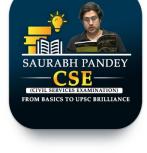
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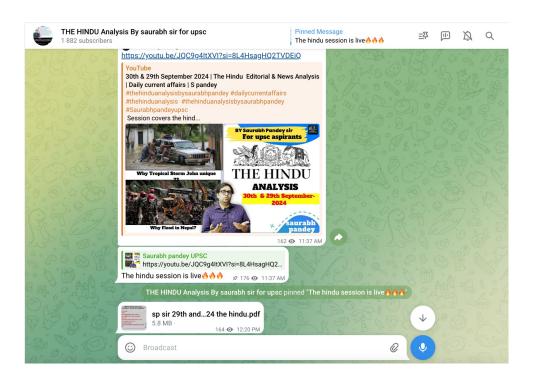


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