

**The Hindu Important News Articles & Editorial For UPSC CSE**

**Monday, 06 Jan, 2024**

**Edition: International Table of Contents**

<p><b>Page 04</b> <b>Syllabus : Prelims Fact</b></p>	<p><b>Toda tribe</b></p>
<p><b>Page 07</b> <b>Syllabus : Prelims Fact</b></p>	<p><b>Moving away from coal a must: South African court upholds 'Cancel Coal' case</b></p>
<p><b>Page 07</b> <b>Syllabus : Prelims Fact</b></p>	<p><b>Dinosaur highway: where dinos walked</b></p>
<p><b>Page 07</b> <b>Syllabus : Prelims Fact</b></p>	<p><b>Grampians National Park</b></p>
<p><b>Page 10</b> <b>Syllabus : GS 2 : International Relations</b></p>	<p><b>Implications of China's mega-dam project</b></p>
<p><b>Page 09 : Editorial Analysis: Syllabus : GS 2 : Social justice – Health</b></p>	<p><b>India needs to prioritise preventive care</b></p>

—It's about quality—

Page 04 : Prelims Fact

Toda tribe in Nilgiris celebrates Modwerth festival, fostering cultural unity and planning for the community's progress in Udhagamandalam.



Revelry time: Members of the Toda tribe in the Nilgiris gather around a 'moonbo' (head) temple in the Muthanad 'mund' (hamlet) in Udhagamandalam on Sunday to celebrate the Modwerth festival and discuss plans for the year

**Toda Tribe:**

- **Location:** Reside in the Nilgiri Hills of Tamil Nadu, primarily around Ooty (Udhagamandalam).
- **Population:** Small tribal community, with numbers declining over the years.
- **Language:** Speak the Toda language, part of the Dravidian family.
- **Livelihood:** Traditionally pastoral, known for rearing buffaloes and producing dairy products.

**Distinctive Culture:**

- Famous for intricately embroidered shawls (Toda embroidery).
- Practice unique rituals associated with dairy, temples, and buffaloes.
- **Housing:** Live in semi-barrel-shaped huts called "munds."
- **Religion:** Animistic beliefs; worship nature, buffaloes, and sacred groves.
- **Festivals:** Celebrate the Modwerth festival to discuss community plans and strengthen cultural bonds.
- **Recognition:** Toda embroidery and lifestyle are recognized as Geographical Indications (GI).

### USPC Prelims Practice Question

**Ques :** Which of the following tribes is known for the "Pithora painting"?

- (a) Santhal
- (b) Bhil
- (c) Gond
- (d) Toda

**Ans: b)**

On December 4, 2024, the High Court in Pretoria ruled against South Africa's government plan to add more coal-fired power stations to the grid.

➔ The court stated that the plan was "inconsistent with the Constitution" and thus unlawful.

# Moving away from coal a must: South African court upholds 'Cancel Coal' case

The court ruled the energy minister and the national energy regulator couldn't provide enough evidence to show that the ill effects of coal power on the environment and the health of the people, especially children, had been considered, suggesting they didn't comply with their constitutional obligations

Priyali Prakash

**C**ivil society organisations claimed a landmark victory against fossil fuel power in South Africa on December 4 when the High Court in Pretoria turned down the national government's plan to add more coal-fired power stations to the country's power grid. According to the court, the government's plan was "inconsistent with the Constitution of the Republic of South Africa" and thus unlawful.

### The 'Cancel Coal' case

In its Integrated Resource Plan (IRP), the government of South Africa announced in October 2019 that it plans to add 1,500 MW of coal power to the country's national grid - 750 MW by 2023 and another 750 MW by 2027.

The Minister of Mineral Resources and Energy and the National Energy Regulator of South Africa in 2020 backed the announcement.

In 2021, youth-led civil organisations including the African Climate Alliance, the Vukani Environmental Justice Movement in Action, and the Groundwork Trust, represented by the Centre for Environmental Rights, brought the case against the government's plan. The group alleged that the plan would harm the environment and cause health issues, especially among children. The case soon acquired the popular moniker "Cancel Coal."

### South Africa's energy mix

Like most economically developing nations, South Africa is heavily dependent on coal for its energy needs.

According to estimates by the International Energy Agency, almost 71% of the country's total energy supply came from coal power in 2022.

According to an analysis of global emissions through history by Climate Watch, South Africa is the world's 16th largest emitter of greenhouse gases.

South Africa has ratified the Paris Agreement, which means it is legally bound to cut its greenhouse gas emissions and contribute to mitigating global warming.

According to the Nationally Determined Contributions South Africa submitted in 2021, the country plans to cut 350-420 million tonnes of carbon-dioxide-equivalent (MtCO<sub>2e</sub>) of greenhouse gas emissions by 2030. It has also committed to reaching net-zero by 2050.

In July 2024, the country's President Cyril Ramaphosa signed the Climate Change Act into law, which includes a clause to reduce greenhouse gas



Cancel Coal protests in South Africa. GROUNDWORK

emissions.

### Details of the judgement

Civil society organisations contended that the government's plan to add more coal power didn't consider the rights of children as granted by the Constitution of South Africa.

According to the Constitution, South African citizens have the right "to have the environment protected, for the benefit of present and future generations." This is to be ensured through measures that "prevent pollution and ecological degradation, promote conservation, secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development."

The court ruled that the Minister of Mineral Resources and Energy and the National Energy Regulator couldn't provide enough evidence to show that the ill effects of the coal power on the environment and the health of the people, especially children, had been considered, suggesting they didn't "comply with their constitutional obligations."

Speaking to *The Hindu*, Ritwick Dutta, environmental justice lawyer and associate at Doughty Street Chambers U.K., said the order is a significant development in the field of climate litigation.

"Although, at the core, the judgment still follows the basic principles of administrative law - duty to give reasons and non-application of mind to relevant consideration - what is however

**South Africa is heavily dependent on coal for energy. Almost 71% of the country's total energy supply came from coal in 2022. According to an analysis by Climate Watch, South Africa is the world's 16th largest emitter of greenhouse gases**

significant is the fact that the court held that the minister, while according approval, did not take into account the interest of the future generations or the unborn generations."

He also highlighted the fact that "since the Court relied on Section 28 of the South African Constitution, which requires the state to protect the child against 'neglect and degradation' to hold that the governments/ministers decision was not in the 'best interest of the child'. The implication of this judgment as I see it is the requirement that a minister/government decision must not be based on the immediate short-term need but must consider a long-term holistic view," Mr. Dutta said.

A 2019 study published in the *International Journal of Environmental Research and Public Health* reviewed epidemiological literature to understand the impact of coal-fired power plant emissions on children's health. It concluded that they affect children negatively due to their "developing physiology, anatomy, metabolism, and health behaviours." The review also observed that children who lived near a

coal-fired plant exhibited more asthma and respiratory-related conditions.

### Environmental justice

The case is also an example of environmental justice in the context of transitioning away from coal worldwide.

"Even in India, for the first time three ministries - Ministry of Power, Ministry of Environment, Forest and Climate Change and the Ministry of New and Renewable Energy - jointly filed an affidavit before the Supreme Court in the case of *M.K Ranjitsingh versus Union of India* that India will have to move from polluting coal to wind and solar not only to ensure cleaner air but also to meet its commitment under the Paris Agreement," Mr. Dutta said. "Coal will continue to meet the energy requirement in the short run, but it is now accepted that transition is a must if the world has to slow down climate change. The fact that courts globally are recognising this reality is ... only natural."

The lawyer also said that even though this case is limited to coal power, combating climate crisis goes beyond it. "Judicial decisions on climate change are a recognition of both the urgency to deal with climate crisis and the fact that civil society groups and citizens have an important role to play in tackling the crisis. It should not be forgotten that the South African judgement is an outcome of litigation undertaken by three civil society groups. It is therefore crucial that the state and the judiciary are more open and receptive towards divergent views on dealing with a crisis of an unparalleled nature," he added.

### THE GIST

In 2021, civil organisations represented by the Centre for Environmental Rights sued the government over plans to start more coal fired plants

South Africa has ratified the Paris Agreement, which means it is legally bound to cut its emissions. It plans to cut 350-420 million tonnes by 2030. In 2024 President Ramaphosa also signed the Climate Change Act into law

A 2019 study concluded that children's physiology, anatomy, and metabolism were negatively affected by plant emissions. The review observed that children who lived near a coal-fired plant exhibited more asthma and respiratory-related conditions

### The 'Cancel Coal' Case

- Civil organizations, including the African Climate Alliance and Vukani Environmental Justice Movement, challenged the government's 2019 Integrated Resource Plan.
- The government planned to add 1,500 MW of coal power by 2027, but the organizations argued it would harm the environment and public health, especially children.

### South Africa's Energy Mix and Climate Commitments

- Coal accounted for 71% of South Africa's energy supply in 2022.
- The country is the 16th largest emitter of greenhouse gases and has committed to cutting emissions and achieving net-zero by 2050, in line with the Paris Agreement.

### Details of the Judgement

- The court found that the government did not adequately consider the harmful effects of coal power on health and the environment, particularly for children.
- The ruling emphasized the government's failure to fulfill its constitutional obligation to protect the environment for future generations.

### Environmental Justice and Global Transition

- The case underscores the growing need to transition from coal to cleaner energy sources globally, a vital step in combating climate change and protecting public health.

### USPC Prelims Practice Question

**Ques : In a coal-fired power station, the primary source of energy is:**

- (a) Heat energy from burning coal
- (b) Mechanical energy from turbines
- (c) Nuclear energy
- (d) Chemical energy stored in coal

**Ans: a)**

A limestone quarry in Oxfordshire, UK, reveals numerous dinosaur footprints, providing insights into Jurassic-era dinosaur movements and species.

## WHAT IS IT?

# Dinosaur highway: where dinos walked

**Vasudevan Mukunth**

limestone quarry in Oxfordshire in the UK has come to be called a “dinosaur highway” for the number of footprints of the long-lost giants scientists have discovered there.

In 1997, workers at the Dewars Farm Quarry revealed more than two score dinosaur footprints, some of them extending for more than 180 metres. Further studies revealed the footprints were from the Jurassic period.

Recently, on January 4, a team of more than a hundred scientists from the University of Birmingham and the University of Oxford announced the discovery of more than 200 footprints in the same quarry. In June last year, a quarry worker had stumbled upon “unusual bumps,” as he called them, when he was digging for clay. After he reported them, the scientists got together and found that the footprints were from 166 million years ago — the Middle Jurassic period.

The team found five trackways — or series of footprints — in all. They said



An artist's impression of sauropod dinosaurs on the Isle of Skye in this undated handout photo provided by the University of Edinburgh, December 2015. REUTERS

four were created by sauropods (long-necked herbivores) called cetiosaurus and one by a carnivore called megalosaurus. Analysis by the team suggested all the animals had been walking, not running, at the (possibly different) times the prints were made. The megalosaurus footprint is particularly serendipitous because 2024 was the 100th year of its study. In 1824, a megalosaurus fossil became the first dinosaur fossil to be unearthed and examined in detail by the British theologian and geologist William Buckland.

### For feedback and suggestions

for 'Science', please write to  
**science@thehindu.co.in**  
with the subject 'Daily page'

**A Dinosaur highway:**

- A limestone quarry in Oxfordshire, UK, is known as a "dinosaur highway" due to numerous dinosaur footprints found there.
- In 1997, more than 20 dinosaur footprints, some extending 180 meters, were discovered at Dewars Farm Quarry.
- The footprints date back to the Jurassic period.
- On January 4, 2024, over 200 new footprints were uncovered by a team from the University of Birmingham and the University of Oxford.
- The footprints, from the Middle Jurassic period, were made by sauropods (cetiosaurus) and a carnivore (megalosaurus).
- The discovery includes five trackways, with evidence that the dinosaurs were walking, not running.

### USPC Prelims Practice Question

**Ques : The extinction of dinosaurs approximately 66 million years ago is widely believed to have been caused by:**

- (a) Volcanic activity
- (b) Asteroid impact
- (c) Climate change
- (d) Disease outbreaks

**Ans: b)**

Grampians National Park, located in Victoria, Australia, has been affected by bushfires amid extreme heat conditions.

**BIG SHOT**



This handout image received on December 26, 2024, from the State Control Centre of the Victoria Emergency Services shows a bushfire in the Grampians National Park in Australia's Victoria state. The country's southeast is sweltering in a heatwave that has raised the risk of bushfires. The nation's weather forecaster said temperatures would be up to 14 degrees C above average in some areas. AFP

**Places in news:**

- Grampians National Park is located in the state of Victoria, Australia.



- The park has been affected by bushfires in late December 2024.
- The bushfires were exacerbated by extreme heat conditions in the region.
- Australia's southeast, including Victoria, experienced a severe heatwave, raising the risk of fires.
- Temperatures in some areas were reported to be up to 14°C above average, intensifying fire hazards.
- Authorities and emergency services are actively working to control the fires and ensure public safety.



The Medog dam, a 60 GW hydropower project, is proposed to be built at the Great Bend region in Medog county, Tibet, China.

# Implications of China's mega-dam project

Do all riparian countries have major water infrastructure projects planned in the river basin of the Brahmaputra? What are China's and India's plans and how will they affect communities living alongside the river basin? How important are Tibet's river systems to the Himalayan bioregion?

## EXPLAINER

Mirza Zulfiqar Rahman

### The story so far:

The ambitious plan to build a mega-hydropower dam across the Brahmaputra at the Great Bend region of the Medog county in the Tibetan Autonomous Region (TAR) in China, has been in the drawing boards of Chinese hydrocracy for decades. The clearest signalling to this effect happened in 2020 when this project was included in China's 14th Five-Year Plan. Its approval was granted on December 25, 2024. India, Bhutan and Bangladesh will have serious downstream implications of this 60 GW hyper-dam built upstream by China.

### Where is this project?

The Brahmaputra is a transboundary Himalayan river basin spanning four riparian countries. China is the uppermost riparian nation with the river system originating in the TAR, where it is known as the Yarlung Zangpo (or Tsangpo). India and Bhutan are lower riparian nations in relation to China and middle riparian countries in relation to Bangladesh. It is from Bangladesh, which is the lowermost riparian nation, that the river drains into the Bay of Bengal. All riparian countries have major water infrastructure projects planned in the river basin, such as hydropower dams, embankments meant for river control, irrigation dams and barrages.

### Is the Brahmaputra river basin trapped within nation-states?

Transboundary river systems are often likened by nation-states to 'taps', which they think can be closed or opened through hydraulic interventions such as dams within their respective nation-states. The Brahmaputra river system has been the site of planned and ongoing mega-dams projects by China, India and Bhutan, all contributing to an intense geopolitical power projection in the river basin. Mega-dams on rivers systems are seen as important sovereignty markers; symbols of nation-state control over natural features. Highly dramatised terms such as 'water wars' are part of the geopolitical vocabulary and upstream hydropower dams are viewed as 'water bombs' by lower riparian nations, as in the case of the Medog dam project. China sits pretty at the top of Asia's water tower, with complete control over Tibet's rivers and significant material, technological and discursive capabilities to deploy unilateral hydrocracy development.

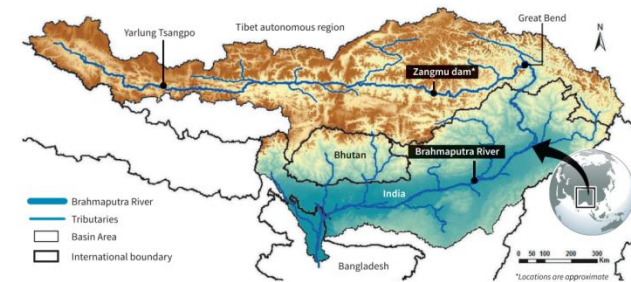
The Chinese hydrocracy has gone forward with mega-hydropower developments such as the Three Gorges Dam on the Yangtze river and the Zangmu Dam on the Yarlung Zangpo, commissioned in 2015, with its top political leadership firmly backing these interventions as state symbols.

### What are the risks for communities inhabiting the Brahmaputra river basin?

The communities living along the river system have adapted as the river has shaped and shifted over centuries. However, with interventions such as mega-hydropower dams by China, India and Bhutan, communities cannot use their traditional knowledge about the river system meaningfully, as the pace and occurrence of disasters have magnified. The upstream communities in Tibet as well as the downstream communities in India, Bhutan and

## Taming the 'rogue' river

The Brahmaputra is a transboundary Himalayan river basin spanning four riparian countries. This map shows its flow from the Tibetan Autonomous Region in China through Bhutan and India into Bangladesh.



**Power play:** Zangmu was the first hydropower project on China's Brahmaputra (Yarlung Tsangpo) to become operational, in 2014. PICTURE: TWITTER

**Source:** Non-decisions are also decisions: power interplay between Bangladesh and India over the Brahmaputra River (DOI: 10.1080/02590016.2018.1554197)

Bangladesh have to live under the shadow of mega-hydropower dams with adverse consequences to their traditional lands and livelihood. The perennial flow of the Brahmaputra in downstream areas in India and Bangladesh depends on the flow of the Yarlung Zangpo. The blocking of that perennial flow, in order to maintain headwaters to operate a mega-hydropower dam of the magnitude that China is planning at the Great Bend, will have catastrophic consequences on surface water levels, and to overall monsoon patterns and groundwater systems of the river basin. This will affect downstream agrarian communities and the sensitive ecology of the overall Himalayan bioregion/ecoregion.

### What explains the hydropower dam-building race in the Brahmaputra river basin?

There is a face-off between China and India on the Yarlung Zangpo-Brahmaputra river course. China has announced the biggest hydropower project at the Great Bend while India has announced its largest dam project, at Upper Siang. Bhutan has been planning and building several medium to small dams, which have raised concerns in downstream India and Bangladesh. None of the riparian countries of the Brahmaputra river basin have signed the United Nations Convention on the Law of the Non-navigational Uses of International Watercourses of 2014, and hence first user-rights on river systems are non-enforceable. China and India have an Expert Level Mechanism (ELM) since

2006, to discuss outstanding issues and share hydrological data, but do not have a comprehensive bilateral treaty to govern shared transboundary rivers. The outstanding land boundary dispute between China and India is woven into the intense securitisation of the Brahmaputra river basin, which makes it an active site for strategic posturing by both countries.

A bioregional/ecoregional frame of protecting the Himalayas may help desecuritize Brahmaputra river basin.

### What next?

A recent academic book by some Australian researchers titled *Rivers of the Asian Highlands: from Deep Time to the Climate Crisis*, puts forward important deep time (deep time means geological time; billions of years) perspectives to Himalayan river systems. The book juxtaposes a wider planetary thinking to emerge against the backdrop of narrow technocratic decision-making to build mega-dams within nation-states.

Tibet's river systems are important to the Earth's cryosphere, comprising permafrost and glaciers, and major climate systems directing climate and precipitation pathways such as the monsoon. Glacial Lake Outburst Floods (GLOFs) have increased in the Himalayas with climate change events, exemplified by the Chungthang Dam collapse in Sikkim during October 2023, which caused widespread devastation to life and property to downstream communities.

The dams across the Himalayas aim at territorialising river systems, breaking

their natural life cycles. This affects agro-pastoral communities, biodiversity, living biota in rivers and wetland systems.

The Brahmaputra river basin will turn into an active risk-cape if all these planned dams are built eventually.

An accurate sense of history will help contextualise the site of the Medog dam being built by China. One of the greatest earthquakes of modern times, the 1950 Medog Earthquake, or the Assam-Tibet Earthquake, which transformed the riparian landscape, had its epicenter at Medog in Tibet. The earthquake had disastrous effects downstream in Assam and Bangladesh, with the landscape until now trapped in an unending cycle of annual catastrophic floods.

Philip Ball in his book titled *Water Kingdom: A Secret History of China* describes the Yarlung Zangpo being viewed in Chinese history as a 'river gone rogue' as it turns sharply from its west to east route at the Great Bend, to turn south to enter India, with other major rivers in China running from west to east. While China is going ahead with building mega-dams in Tibet to correct this geographical anomaly by disciplining a 'rogue river', India can assume an important riparian leadership role for regional river systems by not mirroring what China does. A dam for a dam will make the entire Himalayan riparian/climatic systems run dry and turn it into a disaster-cape for its communities.

Mirza Zulfiqar Rahman is a Visiting Associate Fellow at the Institute of Chinese Studies, Delhi, India.

## THE GIST

The Brahmaputra is a transboundary Himalayan river basin spanning four riparian countries. China is the uppermost riparian nation with the river system originating in the TAR, where it is known as the Yarlung Zangpo.

There is a face-off between China and India on the Yarlung Zangpo-Brahmaputra river course. China has announced the biggest hydropower project at the Great Bend while India has announced its largest dam project, at Upper Siang.

The dams across the Himalayas aim at territorialising river systems, breaking their natural life cycles. This affects agro-pastoral communities, biodiversity, living biota in rivers and wetland systems.

- This dam will have significant downstream consequences for India, Bhutan, and Bangladesh.

### Impact of the Dam

- Mega-dams are seen as tools for asserting sovereignty, with upstream countries like China using them to control natural resources.
- The proposed Medog dam could disrupt the natural flow of the Brahmaputra, which is crucial for agriculture and ecosystems downstream.
- The blocking of water for hydropower generation may impact surface water levels, monsoon patterns, groundwater systems, and agriculture in India, Bhutan, and Bangladesh.

### Brahmaputra River

- The Brahmaputra is a transboundary river flowing through China, India, Bhutan, and Bangladesh. China, the upstream riparian country, controls the river's source in Tibet, where it is known as the Yarlung Zangbo.
- India and Bhutan are middle riparian nations, and Bangladesh is the lowermost riparian country where the river drains into the Bay of Bengal.
- All riparian nations have major water infrastructure projects in the basin, including dams, embankments, and irrigation systems.

### Hydropower Competition

- China and India are competing with major hydropower projects, such as the Great Bend Dam in China and the Upper Siang Dam in India.
- Bhutan also has smaller dams, raising concerns about downstream impacts.
- The lack of a comprehensive treaty on shared rivers, coupled with unresolved territorial disputes, heightens the geopolitical tensions in the region.

### Community Risks

- Local communities along the Brahmaputra river, both upstream and downstream, rely on traditional knowledge of the river's cycles.
- Mega-dams threaten this knowledge and exacerbate disaster risks, impacting agriculture, biodiversity, and the sensitive Himalayan ecology.

### Climate Change and Natural Disasters

## Daily News Analysis

- The Himalayas play a key role in global climate systems, regulating monsoons and glacier dynamics.
- Climate change is increasing Glacial Lake Outburst Floods (GLOFs), as seen with the 2023 Chungthang Dam collapse in Sikkim.
- Dams disrupt natural cycles, affecting ecosystems, communities, and the water system.

### Historical Context

- The 1950 Medog Earthquake had severe downstream effects, causing floods in Assam and Bangladesh, highlighting the region's vulnerability.

### Conclusion

- The Medog dam could exacerbate geopolitical tensions and environmental risks, urging a cooperative, sustainable approach to managing the Brahmaputra's resources.

### USPC Mains Practice Question

**Ques :** Discuss the geopolitical and environmental implications of China's proposed 60 GW hydropower project at the Great Bend on the Brahmaputra River. How can India, Bhutan, and Bangladesh collaborate to mitigate the downstream risks? **(250 Words /15 marks)**

# India needs to prioritise preventive care

India is facing a healthcare crisis that is growing both in scope and cost. We face an alarming dichotomy today: while life expectancy of Indians is expected to increase further, many are facing disease burden earlier. As the country sees an alarming rise in non-communicable diseases (NCDs) such as heart disease, stroke, diabetes, and cancer, the financial burden on individuals and the healthcare system continues to escalate.

NCDs accounted for about 65% of all deaths in 2022, up from about 50% in 2010-13, as per the National Family Health Survey-5. The prevalence of risk factors for NCDs is worryingly high. One in four adult men are hypertensive. One in eight are diabetic. Further, breast, lung, and cervical cancer are on the rise, with the median age of diagnosis occurring earlier than global averages.

Millions of people who are facing these conditions could have been managed better, at often lower costs, had they been diagnosed earlier. In this context, shifting the focus from reactive treatment to proactive prevention is crucial, not only to improve health outcomes but also to control the ever-increasing healthcare expenses.

## A growing economic burden

The Union Budget for 2024 allocated ₹87,657 crore to the Ministry of Health and Family Welfare, marking a 13% increase from the previous year. While this is a step forward, experts agree that this allocation remains insufficient given the scale of India's health challenges.

The National Health Accounts show the total current health expenditure estimate in 2021-22 as ₹7.9 lakh crore, growing at a rate more than overall inflation. The share of household health expenditure, including insurance contributions, while decreasing over time, still drives nearly 50%+ of the spend. This remains one of the highest globally.



**Sathya R. Sriram**

CEO, Preventive Health, Apollo Hospitals



**Akshay Ravi**

Partner, Healthcare practice, EY Parthenon

By prioritising preventive care over reactive treatments, India can pave the way for a healthier and more economically resilient future.

The World Health Organization (WHO) projects that the economic burden of NCDs in India will surpass ₹280 lakh crore by 2030 – a cost equivalent to ₹2 lakh per household. This escalating cost, driven by rising healthcare expenses and productivity losses, poses a severe threat to financial stability, particularly for middle and lower-income families.

Regular screenings, especially for high-risk individuals, could significantly reduce the incidence of serious, life-threatening and debilitating conditions and its resultant cascading economic and social effects. In a large hospital network, for every 1,000 people screened, at least three people are identified for pre-emptive cardiac or cancer interventions.

Targeted but periodic screening investigations for individuals such as mammograms for breast cancer, pap smears for cervical cancer, X-ray or low-dose computed tomography for lung cancer, ultrasound for liver disease, echo cardiography and treadmill stress test for heart disease beyond the physical vitals and blood tests enable early intervention.

Unfortunately, comprehensive health checks (which can cost anywhere between ₹8,000 and ₹15,000 in metro cities today) are perceived as expensive. If the government were to enable a step change in preventive health services adoption, it could significantly reduce the overall financial burden on individuals and the healthcare system.

Tax incentives, subsidised screenings, and public awareness are key policy tools that can enable this. As part of the Finance Act, 2013, the Union government made efforts to encourage preventive healthcare by offering a ₹5,000 tax deduction under Section 80D of the Income Tax Act for health checks. However, this amount has remained stagnant for the last decade, despite the 12-14% estimated healthcare inflation rate and the rising cost of healthcare services. Thus, it would be

prudent for our policymakers to consider revising the tax deduction limit to at least ₹15,000 in the Union Budget for 2025-26. This would incentivise more individuals to undergo preventive health checks, potentially saving the nation several thousand of crores in future healthcare costs. The incremental tax foregone to the exchequer from such a measure is estimated to be less than ₹5,000 crore, a worthy investment towards improving the health of the nation.

## The path forward

We need to prioritise preventive care to mitigate the increasing economic and financial burden of chronic diseases. A three-pronged approach can potentially drive a change in the adoption of preventive health services.

First, we need to strengthen early intervention capabilities through the Ayushman Health and Wellness Centres, including capturing trends effectively and enabling risk-driven targeted screening using AI-enabled imaging modalities to offer lower cost screenings at-scale.

Second, we need to improve the adoption of screening at private centres by encouraging insurers and private health providers to offer a subsidised minimum screening programme for every individual between 40-60 years. For example, for women after the age of 40, a mammogram is necessary annually or once in two years, based on her risk factors. Exploring part funding through allocations from proceeds from the healthcare cess or the proposed 35% GST slab on tobacco and sugar products can help reduce funding needs.

Finally, the increase in tax deduction limit can further incentivise people to complete comprehensive health checks.

By prioritising preventive care over reactive treatments, India can pave the way for a healthier and more economically resilient future.

### **GS Paper 02 : Social justice – Health**

**UPSC Mains Practice Question:** Discuss the growing burden of non-communicable diseases (NCDs) in India and suggest policy measures to enhance preventive healthcare to address this challenge. **(150 Words /10 marks)**

### **Context :**

- ▶ India faces a rising healthcare crisis with an increasing burden of non-communicable diseases, escalating costs, and the urgent need to prioritize preventive healthcare measures.

### **Rising Healthcare Challenges in India**

- ▶ India is witnessing a growing healthcare crisis characterized by an increase in non-communicable diseases (NCDs) like heart disease, stroke, diabetes, and cancer.
- ▶ While life expectancy is rising, many Indians are experiencing a higher disease burden earlier in life.
- ▶ NCDs accounted for 65% of all deaths in 2022, a significant rise from 50% in 2010-13, as per the National Family Health Survey-5.

### **Alarming Trends in NCDs**

- ▶ One in four adult men in India is hypertensive, and one in eight is diabetic.
- ▶ Breast, lung, and cervical cancers are increasing, with the median age of diagnosis earlier than global averages.
- ▶ Late diagnosis exacerbates healthcare challenges, as earlier detection could reduce costs and improve outcomes.

### **Financial Burden of Healthcare**

- ▶ The Union Budget for 2024 allocated ₹87,657 crore to the Ministry of Health and Family Welfare, reflecting a 13% increase from the previous year.
- ▶ Despite this increase, healthcare spending remains insufficient given the magnitude of the crisis.
- ▶ Total current health expenditure in 2021-22 was ₹7.9 lakh crore, growing faster than inflation.
- ▶ Household health expenditure still accounts for more than 50% of total spending, one of the highest globally.

### **Escalating Economic Impact of NCDs**

- ▶ WHO projects that the economic burden of NCDs in India will exceed ₹280 lakh crore by 2030, equating to ₹2 lakh per household.
- ▶ Rising healthcare costs and productivity losses threaten the financial stability of middle and lower-income families.

### Importance of Preventive Healthcare

- ▶ Regular screenings for high-risk individuals can reduce the incidence of severe diseases and mitigate financial and social repercussions.
- ▶ For every 1,000 people screened, at least three are identified for pre-emptive interventions for cardiac or cancer-related conditions.

### Barriers to Preventive Care Adoption

- ▶ Comprehensive health checks, costing between ₹8,000 and ₹15,000 in metro cities, are perceived as expensive.
- ▶ Tax incentives, subsidized screenings, and increased public awareness are key to encouraging preventive care.

### Policy Recommendations

- ▶ The tax deduction for health checks under Section 80D of the Income Tax Act has remained stagnant at ₹5,000 since 2013.
- ▶ Revising the tax deduction limit to ₹15,000 in the Union Budget 2025-26 could incentivize preventive health checks.
- ▶ The estimated cost to the exchequer for this measure is less than ₹5,000 crore, a justifiable investment for improved public health.

### A Three-Pronged Approach for Preventive Care

- ▶ **Strengthen Ayushman Health and Wellness Centres:**
  - Enable early intervention through AI-driven imaging for cost-effective, large-scale screenings.
  - Encourage Private Sector Participation:
  - Partner with insurers and private health providers to offer subsidized screening programs for individuals aged 40-60.
  - Use proceeds from healthcare cess or GST on tobacco and sugar products to fund screenings.
- ▶ **Increase Tax Incentives:**
  - Raise the tax deduction limit to encourage individuals to undergo comprehensive health checks.

### Conclusion

- ▶ Shifting the focus to preventive care over reactive treatments can mitigate the economic and financial burden of chronic diseases.
  - ▶ This approach will improve health outcomes and pave the way for a healthier and more financially resilient nation.
-