

The Indian Express

The City

New air pollution combat plan being firmed up in city (Page no. 4) (GS Paper 3, Environment)

The Graded Response Action Plan (GRAP), which sets in with emergency measures when air quality worsens in Delhi, is likely to be revised.

A policy prepared by the Commission for Air Quality Management (CAQM) to curb air pollution in the National Capital Region (NCR) has recommended revisions to the GRAP.

The policy, which was made public was formulated by a nine-member expert group constituted by the CAQM earlier this year.

The group examined 115 submissions received from the public on dealing with air pollution before formulating a policy that recommends action in different sectors within a specific timeline to control pollution and meet the National Ambient Air Quality Standards.

According to a communication from the CAQM, the policy has been shared with ministries of the Union government and NCR state governments to take action.

Suggested revisions to the GRAP, which was notified in 2017, include taking action based on the air quality index (AQI) and not the existing system of response that kicks in based on particulate matter concentrations.

Action taken when AQI is 'very poor', 'severe' or 'severe+' will be invoked "at least three days in advance of the AQI reaching the projected levels of that stage" based on forecasts.

Under the existing plan, action was initiated when pollution levels reached a certain threshold, and not in advance. Ban on construction activities will set in when AQI is 'severe', and NCR state governments may impose restrictions on BS-III petrol and BS-IV diesel four-wheelers.

Under restrictions in the 'severe+' category, there is likely to be a ban on plying of four-wheeler diesel light motor vehicles in Delhi and districts bordering Delhi, except for BS-VI vehicles and those used for essential or emergency services.

Under this category, state governments will decide on allowing 50% of staff to work from home in public, municipal and private offices, and consider additional measures like closure of educational institutions, and plying of vehicles on odd-even basis.

The previous plan did not have any specific restrictions on light motor vehicles, apart from enforcement of Pollution Under Control (PUC) norms, and odd-even for private vehicles.

Editorial Page

Rulers and their emblems (Page no. 10) (GS Paper 2, Polity and Governance)

What is so disturbingly different about India's national emblem as Indians know it and how the emblem has been conceived and represented at the new Parliament building?

For one, the ferocious expression on the faces of the new lions is qualitatively different from the benign aura of their back-to-back seated brethren on the Sarnath capital.

There is absolutely nothing about their expressions which would remind us of the controlled modelling of the Ashokan specimens. Rather, the new lions are more at home with a style that is widely seen in ancient West Asia.

That style was excellently juxtaposed more than 50 years ago by S P Gupta in *The Roots of Indian Art* when he wrote that the Ashokan lions "were never expected to rouse fear in the minds of the onlookers while their West Asian cousins were invariably meant to inspire awe and fear".

This is a prescient observation and makes me wonder whether the creators have imbued these lions with qualities that they associate with our modern rulers.

Further, while the legs of the king of beasts at Sarnath are naturalistically depicted with a vein or two running in relief across some, the Parliament lions have prominent muscles and veins. The feel of brawny strength that this evokes is not seen in the more slender, restrained Ashokan form.

If those who conceived this version of the national emblem had paid some attention to history, they would have learnt a few things about how the Sarnath pillar capital and some of its features have been replicated and reimagined across time.

In no instance in antiquity has any artist managed to capture the feel of the lions in their exquisite Ashokan form.

The Gupta dynasty, for instance, is known for its beautiful art and architecture. However, when the lion-capital was copied at Sanchi by a Gupta sculptor, he could only manage “a feeble and clumsy imitation”.

These are the words of John Marshall who was the director-general of the Archaeological Survey of India when the Sarnath pillar capital had been found.

A short in the arm (Page no. 10)

(GS Paper 3, Science and Technology)

On Tuesday, India took a significant step forward in checking cervical cancer which kills more than 60,000 women in the country every year.

The Drugs Controller General of India granted market authorisation to the Pune-based Serum Institute to manufacture the country’s first indigenously developed vaccine, Cervavac, against the human papillomavirus (HPV).

HPV is responsible for more than 95 per cent of cervical cancer cases. The vaccine, which has been almost four years in the making, reported encouraging results in the clinical trials — an antibody response that’s 1,000 times more than the baseline required against all HPV types.

If things go according to SII’s schedule, Cervavac should be ready for mass manufacturing by the end of the year. The government shouldn’t lose time in including the vaccine in the country’s Universal Immunisation Programme.

HPV is a common pathogen. But only a small proportion of its strains cause cancer. The disease is largely preventable and a combination of early screening techniques and vaccination has reduced its virulence considerably in most developed countries in the past 15 years. India has remained an outlier to these developments.

The Ministry of Health and Family Welfare’s data show that there are more than 4 lakh cervical cancer patients in the country at any given time — it’s the second-most common cancer amongst Indian women.

The health ministry’s guidelines recommend cervical cancer screening every five years for women above 30 at primary health centres and sub-health centres.

But several studies have shown that the public health system in large parts of the country is ill-equipped to perform such gynaecological procedures, despite their relatively low cost.

In 2018, the National Technical Advisory Group on Immunisation recommended the inclusion of cervical cancer vaccines in the country’s Universal Immunisation Programme.

The Unseen the universe (Page no. 10)

(GS Paper 3, Science and Technology)

Swathes of blue and orange swirling mysteriously in an ocean of interstellar dust; stars, like glittering jewels, on a bed of velveteen cosmic darkness; a landscape of peaks and troughs, secrets and auguries.

A hint of water, perhaps, on a distant exoplanet, throwing open tantalising prospects of the possibility of life in faraway galaxies.

On Tuesday, the James Webb Space telescope, the state-of-the art infrared successor of the Hubble Space Telescope, and a product of nearly \$10 billion and three decades of collaborative research between NASA, the European Space Agency and the Canadian Space Agency, rendered visible all the light that we previously could not see.

The new pictures, the deepest and sharpest infrared images of the universe possible yet, were revealed in the US in an event at NASA’s Goddard Space Flight Centre in Greenbelt, Maryland, heralding a “giant leap forward” in astronomy and the birth of a star here in our own galaxy.

For, in its success, the James Webb Space telescope has upended the limitations of access, offering us the first concrete impressions of the cosmic evolution since the Big Bang 13.8 billion years ago and the genesis of the earliest galaxies a few hundred million years afterwards.

The gift of astronomy is its potential to act both as an oracle and a soothsayer. At all times, a vision of space involves decoding clues to make comprehensible the remoteness of the past while taking a headlong tumble into a future radiant with possibilities.

Light travels at a speed of 1,86,000 miles per second through space. Stretched by time and distance, what these newest images show us is a vision of the universe as it once existed and the potential of worlds that could come to be.

Fittingly, it is a humbling affirmation of our own puniness set against the vast, ever evolving cosmos, and an enduring testament to the human capacity for curiosity and knowledge.

Explained

What India’s first HPV vaccine could mean for fight against cervical cancer (Page no. 13)

(GS Paper 3, Science and Technology)

The Serum Institute of India (SII)'s vaccine Cervavac recently received the Drugs Controller General of India's (DGCI) approval for market authorisation. Cervavac is India's first quadrivalent human papillomavirus vaccine (qHPV) vaccine, and intended to protect women against cervical cancer.

Experts see this as a real opportunity to eliminate cervical cancer, and have expressed the hope that it will be rolled out in national HPV vaccination strategies, and be available a cost more affordable than existing vaccines.

Cervical cancer is preventable, but kills one woman every eight minutes in the country, said Dr Smita Joshi, senior scientist with Prayas health group, a public charitable trust working on sexuality, gender, and HIV/AIDS. It is preventable as long as it is detected early and managed effectively.

Cervical cancer is a common sexually transmitted infection. Long-lasting infection with certain types of HPV is the main cause of cervical cancer.

Worldwide, cervical cancer is the second most common cancer type and the second most common cause of cancer death in women of reproductive age (15–44). India accounts for about a fifth of the global burden, with 1.23 lakh cases and around 67,000 deaths per year according to the World Health Organization's International Agency for Research on Cancer (IARC-WHO).

“Screening and vaccination are two powerful tools that are available for preventive cervical cancer. Still there is little awareness among women for prevention of this cancer and less than 10% of Indian women get screened.

All women aged 30-49 must get screened for cervical cancer even if they have no symptoms and get their adolescent daughters vaccinated with HPV vaccine,” Dr Joshi said.

When parties claim same symbol (Page no. 13)

(GS Paper 2, Polity and Governance)

The Uddhav Thackeray-led Shiv Sena approached the Election Commission of India, requesting it to hear its side before deciding claims to the party's bow-arrow symbol.

The Shiv Sena has lost a large number of members in the Eknath Shinde-led rebellion that eventually caused the fall of the Thackeray-led government in Maharashtra.

The Thackeray camp approaching the EC was a pre-emptive move, since the dispute hasn't yet officially reached the EC's doorstep.

Shinde, who has claimed to be the “original” Shiv Sena on the basis of the support of more than two-thirds of the party's legislators in the Maharashtra Assembly, has not officially written to the EC yet to stake claim to the party symbol.

“We have filed a caveat with the ECI, requesting it to make the original Shiv Sena [led by Uddhav Thackeray] a party to the case if any party or group approaches the ECI with regard to any matter related to Shiv Sena,” Shiv Sena MP Anil Desai said.

If and when the Shinde camp approaches the EC, the latter will in all likelihood freeze the symbol so that neither of the two sides is able to use it until a final decision is made.

EC hearings are long and detailed, and may take at least six months. How does it decide who gets the symbol — often the very identity of a party and its fundamental connection with voters — when parties split?

On the question of a split in a political party outside the legislature, Para 15 of the Symbols Order, 1968, states: “When the [Election] Commission is satisfied... that there are rival sections or groups of a recognised political party each of whom claims to be that party the Commission may, after taking into account all the available facts and circumstances of the case and hearing [their] representatives... and other persons as desire to be heard decide that one such rival section or group or none of such rival sections or groups is that recognised political party and the decision of the Commission shall be binding on all such rival sections or groups.”

This applies to disputes in recognised national and state parties. For splits in registered but unrecognised parties, the EC usually advises the warring factions to resolve their differences internally or to approach the court.

Global Gender Gap Index and india's low ranking (Page no. 13)

(GS Paper 2, Polity and Governance)

The Global Gender Gap Index for 2022 was released by the World Economic Forum (WEF) Wednesday, and it ranks India at 135 out of 146 countries. In 2021, India was ranked 140 out of 156 countries.

The Global Gender Gap index “benchmarks the current state and evolution of gender parity across four key dimensions (Economic Participation and Opportunity, Educational Attainment, Health and Survival, and Political Empowerment)”.

According to the WEF it is the longest-standing index, which tracks progress towards closing these gaps over time since its inception in 2006.

On each of the four sub-indices as well as on the overall index the GGG index provides scores between 0 and 1, where 1 shows full gender parity and 0 is complete imparity.

“The cross-country comparisons aim to support the identification of the most effective policies to close gender gaps,” states the report.

India has approximately 662 million (or 66.2 crore) women. In 2022, India’s overall score has improved from 0.625 (in 2021) to 0.629. “India’s (135th) global gender gap score has oscillated between 0.593 and 0.683 since the index was first compiled. In 2022, India scored 0.629, which is its seventh-highest score in the last 16 years,” states the report.

Economy

New IT Act looks to rein in ‘deliberate’ misinformation (Page no. 15)

(GS Paper 2, Polity and Governance)

Recognising that offences in the online world, including social media platforms, can be unique with no equivalent in the offline world, the Ministry of Electronics and IT (MeitY) is considering regulation of “deliberate” misinformation and doxxing as offences under a fresh legislation, which is expected to replace the Information Technology Act, 2000.

The new law is also expected to have provisions to ensure net neutrality, data privacy, and algorithmic accountability of social media platforms like Facebook, Twitter and YouTube, it is learnt.

The new legislation, being referred to as the Digital India Act within the government, is expected to have a focus on “user harms” specific to the online world, which have “diversified” significantly since the IT Act was last amended in 2008.

“For instance, currently under Indian laws, online misinformation is not illegal,” he said. The IT Act is currently India’s core legal framework that regulates entities on the internet such as social media platforms and e-commerce companies.

“The Indian Penal Code (IPC) looks at misinformation from the lens of defamation. Beyond that, there is no adjudication on deliberate attempts at misinformation and the ministry is having a discussion to include it as an offence under the new Act, the official said. “Deliberate online misinformation has to be separated from defamation, which is a very different kind of an offence.”

The IT Ministry is also learnt to be considering adding doxxing as an offence under the new Act. Doxxing is essentially an attempt by a person to publish private or identifying information about a particular individual on the internet, typically with malicious intent.

From the common trend of trolling on social media, we are now seeing increasing instances of people getting doxxed and the new Act will cover it.