

INTERNATIONAL RELATION

WHO AIR QUALITY DATABASE 2022

- The World Health Organisation's air quality database 2022 has stated that almost the entire global population (99 percent) breathes air that exceeds WHO's air quality limits.

Key Findings

Quality monitored but still bad:

- More than 6,000 cities in 117 countries are now monitoring air quality but their residents are still breathing unhealthy levels of fine particulate matter and nitrogen dioxide, while people in low and middle-income countries suffer the highest exposure.

NO2 concentrations:

- For the first time data has been taken from on ground measurements of annual mean concentrations of nitrogen dioxide (NO2).
- NO2 is a common urban pollutant and precursor of particulate matter and ozone.

Particulate matter:

- It also includes measurements of particulate matter with diameters equal or smaller than 10 µm (PM10) or 2.5 µm (PM2.5).
- Both groups of pollutants originate mainly from human activities related to fossil fuel combustion.

Effect on health:

- Particulate matter, especially PM 2.5, is capable of penetrating deep into the lungs and entering the bloodstream, causing cardiovascular, cerebrovascular (stroke) and respiratory impacts.
- NO2 is associated with respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms.

Significance

Increasing Awareness:

- As many as 2,000 more cities and human settlements are now recording ground monitoring data for particulate matter, PM10 and/or PM2.5, than in the last update.
- This marks an almost sixfold rise in reporting since the database was first made in 2011.

Better Evaluation:

- WHO last year revised its air quality guidelines, making them more stringent in an effort to help countries better evaluate the healthiness of their own air.

WHO's New Air Quality Guidelines

WHO's new guidelines recommend air quality levels for six pollutants —

- particulate matter (PM),
- ozone (O₃),
- nitrogen dioxide (NO₂)
- sulfur dioxide (SO₂) and
- carbon monoxide (CO) —

that are not just health hazards but they also give rise to other damaging pollutants.

PM10:

- The annual average for PM 10 should not exceed 15 micrograms per cubic metre of air, while the 24-hour average should not exceed 45 micrograms per cubic metre.
- Compared to this, the earlier limit was 20 micrograms per cubic metre annually and 50 micrograms per cubic metre in a day.

PM2.5:

- The recommendation for PM 2.5 is that the annual average should not exceed 5 micrograms per cubic metre, or 15 micrograms per cubic metre in a day.
- The earlier limit was 10 micrograms per cubic metre annually and 25 micrograms per cubic metre in a day.

Ozone:

- Ozone levels average should not exceed 100 micrograms per cubic metre over a 24-hour period,

NO2:

- nitrogen oxide should not exceed 25 micrograms per cubic metre,

SO2:

- sulphur dioxide should remain below 40 micrograms per cubic metre

CO:

- carbon monoxide levels should not exceed more than 4 micrograms per cubic metre over the same time period.

Way Ahead

Standardisation & Monitoring:

- Adopt or revise and implement national air quality standards according to the latest WHO Air Quality Guidelines.
- Monitor air quality and identify sources of air pollution

Energy Efficiency:

- Support the transition to exclusive use of clean household energy for cooking, heating and lighting
- Invest in energy-efficient housing and power generation.
- Curbing fossil fuel use and taking other tangible steps to reduce air pollution levels.

Sustainable Transportation:

- Build safe and affordable public transport systems and pedestrian- and cycle-friendly networks
- Implement stricter vehicle emissions and efficiency standards; and enforce mandatory inspection and maintenance for vehicle

Waste Management:

- Improve industry and municipal waste management
- Reduce agricultural waste incineration, forest fires and certain agro-forestry activities (e.g. charcoal production)

Awareness & Education:

- Include air pollution in curricula for health professionals and providing tools for the health sector to engage.

World Health Day, 2022

- World Health Day, marked on 7 April, will focus global attention on urgent actions needed to keep humans and the planet healthy and foster a movement to create societies focused on well-being.
- WHO estimates that more than 13 million deaths around the world each year are due to avoidable environmental causes.
- Theme for 2022: 'Our planet, our health'.**

IMPORTANT FACTS FOR PRELIM

1. Great Indian Bustard

- Recently, the Supreme Court directed the High Level Committee to submit a status report in relation to protection of the Great Indian Bustard.
- The committee was constituted to examine the feasibility of under-grounding of overhead power lines.
- Great Indian Bustard (GIB)

About:

- It is one of the heaviest flying birds endemic to the Indian subcontinent.
- It is a State Bird of Rajasthan.

Habitat:

- Untamed, Arid grasslands.
- A Maximum number of GIBs were found in Jaisalmer and the Indian Army-controlled field firing range near Pokhran, Rajasthan.
- Other areas: Gujarat, Maharashtra, Karnataka and Andhra Pradesh.

Population:

- As per the studies conducted by Wildlife Institute of India, there are around 150 Great Indian Bustards left across the country which includes about 128 birds in Rajasthan and less than 10 birds each in the States of Gujarat, Maharashtra, Andhra Pradesh and Karnataka.

Protection Status:

- IUCN Status: Critically Endangered.
- Listed in Wildlife Protection Act's Schedule 1.

Threats to the Bird:

- Hunting, Intensification of agriculture, Power lines.

Indian Initiatives for Protection of GIB

- **‘Habitat Improvement and Conservation Breeding of Great Indian Bustard-an integrated approach’:**
 - ❖ The Ministry with financial support from National Authority for Compensatory Afforestation Funds has sanctioned an outlay of Rs. 33.85 crores for the duration of five years for the programme titled ‘Habitat Improvement and Conservation Breeding of Great Indian Bustard-an integrated approach’.
- **The objective :**
 - ❖ To build up the captive population of Great Indian Bustard and to release the chicks in the wild for increasing the population and also to promote in-situ conservation of the species.

Task Force:

- The Ministry has also constituted a Task Force for suggesting Eco- friendly measures to mitigate impacts of power transmission lines and other power transmission infrastructures on wildlife including the Great Indian Bustard.
- The Great Indian Bustard has been included in the Appendix I of Convention on Migratory Species (CMS) on the basis of a proposal submitted by India.
 - ❖ It was also the mascot of the prestigious 13th CMS Conference of Parties held in Gandhinagar giving wider publicity for the conservation of the species.
- Important habitats of Great Indian Bustards are designated as National Parks/Sanctuaries for their better protection.
- The species has been identified for conservation efforts under the component ‘Species Recovery Programme’ of the Centrally Sponsored Scheme (CSS)-Development of Wildlife Habitat.
- Directions of the National Green Tribunal (NGT): NGT ordered a time-bound action plan for the implementation of mitigation measures such as installation of bird diverters and their regular maintenance and monitoring by power agencies.
- **Conservation Reserves:** Great Indian Bustard habitats to be declared as conservation reserves.
- Project Great Indian Bustard launched by the Rajasthan government.

2. India’s First Steel Slag Road

- Surat has become the first city in the country to get a processed steel slag (industrial waste) road built as part of a joint-venture project by the CSIR, CRRI, Union Ministry of Steel, NITI Ayog, and ArcelorMittal-Nippon Steel (AM/NS), at Hazira.

About the Road

- It is a six-lane public road. The construction began around a year ago by converting mounds of steel waste into steel slag aggregate.
- The road is now being used by heavy-duty vehicles of multinationals located in the industrial estate on the outskirts of Surat.
- This project falls under the initiative of the Waste to Wealth and Clean India Campaign.
- **Process:**
 - The slag is generated from a steel furnace burning at around 1,500-1,600 degree centigrade in the form of molten flux material as an impurity.
 - The molten material is poured into the slag pits for cooling as per the customised procedure and further processed to develop stable steel slag aggregates, with “better material properties in place of the natural aggregate commonly used in road constructions
- **Benefits:**
 - The utilisation of processed steel slag in road construction paves the way for sustainable use of waste and reduces the reliance on perishable natural aggregates.
 - The construction cost of the processed steel slag road is 30 per cent cheaper than roads built from natural aggregates.
 - The thickness of the road is also 30 per cent lesser than normal ones, while the durability is much longer due to the utilisation of steel slag.
 - The lifespan of a cement or concrete road is over 30 years while that of bitumen and steel slag road is around 15 years.
 - These roads are also much more durable during the monsoon.
 - It is in line with India’s commitment to the United Nations Sustainable Development Goal No. 9 for building resilient infrastructure through inclusive and sustainable industrialization and green technologies.

3. Familial Forestry

- About 2.5 million saplings have been planted in the past 15 years, with active participation of students and desert dwellers under Familial Forestry.

About Familial Forestry

- Familial Forestry means caring for the tree as a family member so that the tree becomes a part of the family's consciousness.
- This movement involved more than a million families from more than 15,000 villages of desert-prone northwest Rajasthan.
- Familial Forestry of Rajasthan is a unique concept that relates a tree with a family, making it a green "family member".
- This green or eco socialisation brings environmental sensitivity and empowerment.
- Land for life Award 2021 was conferred to the Familial Forestry of Rajasthan, India, by UNCCD in 2021.

Other related initiatives

- The Government has various schemes relating to afforestation/plantation leading to combating desertification and land degradation depending on the climatic and geographical condition of that particular area including schemes of MOEFCC under Twenty Point Programme (TPP) like National Afforestation Programme (NAP), National Mission for a Green India (GIM) etc.

Land for Life award

- It is an award programme of the United Nations Convention to Combat Desertification (UNCCD), which is conferred every two years.
- The Land for Life Award aims to provide global recognition to individuals and organisations whose work and initiatives have made a significant contribution to sustainable development through sustainable land management (SLM).

4. Bucha (Ukraine)

- More than 300 bodies have been found in a Kyiv suburb called Bucha. The discoveries have drawn comparisons with the killings of civilians in this area during World War II.

About Bucha

Bucha:

- The discoveries have been made in a Kyiv suburb called Bucha, a town located about 25 km to the northwest of the capital, which had an estimated population of around 36,000 before the invasion began.
- The discoveries have drawn comparisons with the killings of civilians in this area during World War II.
- The First Battle of Kyiv in which part of Hitler's Operation Barbarossa against the Soviet Union that began in June 1941 and
- The Second Battle of Kyiv when the Red Army started to push back the Germans from Ukraine, the area around the Ukrainian capital, including Bucha, saw the Holocaust by bullets during which an estimated 1.5 million people, mostly Jews, were shot dead at close range.

Genocide or war crimes?

- Ukraine and the West have accused Russia of war crimes even earlier, alleging that it targeted civilians in the bombing.
- War crimes are defined as "grave breaches" of the Geneva Conventions, agreements signed after World War II that laid down international humanitarian laws during war time.
- Deliberately targeting civilians amounts to a war crime.
- The International Criminal Court (ICC) at The Hague has already opened an investigation into possible war crimes by Russia.
- The crime of genocide, as defined by the United Nations Genocide Convention of December 1948, includes acts "committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group".
- Genocide is seen as the gravest and most serious of all crimes against humanity.

Issues associated

- Russia does not recognise the ICC and will likely not cooperate with the investigation.
- Differences of opinion on what constitutes genocide explain in part the reluctance of the international community to use the term frequently.

History of genocides

- Holocaust in which more than 6 million Jews were exterminated
- The 1915-20 mass killings of Armenians by the Ottoman Turks
- The killings of 800,000 Tutsis and moderate Hutus in Rwanda in 1994
- The Srebrenica massacre of 1995.

Global reaction

- Amid calls for more, stronger sanctions against Russia, Germany, France, Italy, Spain, Denmark, and Sweden have expelled dozens of Russian diplomats, and Swedish prosecutors have opened a preliminary investigation into possible war crimes in Ukraine.

DAILY ANSWER WRITING PRACTICE

Q1. The focus on the quality and coverage of health services through public health initiatives have contributed majorly to the decline in the Maternal Mortality Rate (MMR) in India. Precise focus must however be continued in states still showing high mortality rate to achieve SDG-3.

Introduction

- India's maternal mortality ratio (MMR) has improved to 103 in 2017-19, from 113 in 2016-18. This is according to the special bulletin on MMR released by the Registrar General of India March 14, 2022.
- As per the World Health Organisation, maternal death is the death of a woman while pregnant or within 42 days of termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management.

Body

MMR in states: Findings

- The number of States that have achieved the SDG target has now risen from five to seven — Kerala (30), Maharashtra (38), Telangana (56), Tamil Nadu (58), Andhra Pradesh (58), Jharkhand (61), and Gujarat (70).
- Kerala has recorded the lowest MMR which puts Kerala way ahead of the national MMR of 103.
- Kerala's Maternal MMR has dropped by 12 points. The last SRS bulletin (2015-17) had put the State's MMR at 42 (later adjusting it to 43).
- There are now nine States that have achieved the MMR target set by the NHP, which include the above seven and Karnataka (83) and Haryana (96).
- Uttarakhand (101), West Bengal (109), Punjab (114), Bihar (130), Odisha (136) and Rajasthan (141) — have the MMR in between 100-150, while Chhattisgarh (160), Madhya Pradesh (163), Uttar Pradesh (167) and Assam (205) have the MMR above 150.

Reasons for declining MMR

Focus on quality and coverage of health services through public health initiatives have contributed majorly to the decline. Some of these initiatives are:

- LaQshya, Poshan Abhiyan, Janani Suraksha Yojana, Pradhan Mantri Surakshit Matritva Abhiyan, Pradhan Mantri Matru Vandana Yojana.
 - ❖ LaQshya Labour room Quality Improvement Initiative: Recently, the Union Ministry of Health and Family Welfare has launched "LaQshya" (Labour room Quality Improvement Initiative) to improve the quality of care in the labour room and maternity operation theatres in public health facilities.
- Poshan Abhiyan: Targets expecting and new mothers along with the children. It has helped reduce anaemia in women and guiding them on right nutrition.
- With the objective to provide quality ANC to every pregnant woman the Government of India has launched the Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA), a fixed day ANC's given every month across the country.
- This is to be given in addition of the routine ANC at the health facility.
- The implementation of the Aspirational District Programme and inter-sectoral action has helped to reach the most marginalized and vulnerable population.
- Recently launched Surakshit Matritva Aashwasan Initiative (SUMAN) especially focuses on zero preventable maternal and newborn deaths.
- The continuous progress in reducing the MMR will help the country to achieve the SDG 3 target of MMR below 70 by 2030.

Conclusion and way forward

- In conclusion, women deserve the right to safe maternity services. This includes physical and emotional safety for the mother and baby.
- Hence, a well-managed system that allows pregnant women to access maternal health care with minimum exposure risk is essential during the outbreak.
- Simultaneously, task sharing with community health workers under regulatory and legal provisions must be explored.
- E-training mechanisms and capacity building exercises must be undertaken for the additionally requisitioned health workforce to reduce the workload of time-sensitive commitments and non-health work.
- Importantly, the health workers must also be trained to reduce the risk, stigma and sensitization of pregnant women on COVID-19 symptoms, prevention and hygiene.

DAILY QUIZ

Q1. With reference to Stand Up India Scheme, consider the following statements:

1. It aims to promote entrepreneurship among all the economically marginalized people.
2. It facilitates bank loans between 1 lakh and 1 crore.
3. Loans under the scheme are available for only greenfield projects.

Which of the statements given above are correct?

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

Q2. Consider the following statements:

1. NATGRID is the integrated intelligence grid connecting databases of core security agencies of India.
2. It was proposed in the aftermath of the terrorist attacks on the Indian Parliament in 2001.
3. It is exempted from the Right to Information Act, 2005.

Which of the given statements are correct?

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

Q3. Which of the following is correct regarding the Land for Life Award?

- (a) It is an award programme of the International Union for Conservation of Nature (IUCN).
- (b) None of these
- (c) It is conferred every year to the most deserving organisation in the field of Conservation of Nature.
- (d) It is given to most diverse changemakers engaged in land restoration and conservation through exemplary and innovative initiatives.**

Q4. Which of the following countries border Ukraine?

- | | |
|---------------|------------|
| 1. Belarus | 2. Moldova |
| 3. Russia | 4. Poland |
| 5. Hungary | 6. China |
| 7. Kazakhstan | |

Select the correct answer using the codes given below:

- (a) 1 and 3 only
- (b) 2,3, 5, 6 and 4 only**
- (c) 1,3,4 and 2 only
- (d) 1, 3 and 4 only

Q5. “The Renke commission” sometimes seen in the news, is related?

- (a) To look after atomic energy activities
- (b) To recommend ways to improve cattle condition
- (c) To protect and promote the interests of women
- (d) To identify and list the DNT communities.**