



AIR Discussions (October 3rd Week)

ALL INDIA RADIO SUMMARY (17 October -24 October, 2020)

SPOTLIGHT (18 October, 2020)

GS-II: HEALTH, GOVERNMENT POLICIES AND INTERVENTIONS

COMBATING AIR POLLUTION –CHALLENGES AND WAY FORWARD

Context: The State of Global Air 2020, report released.

- SOGA, released by US-based Health Effects Institute and Global Burden of Disease (GBD).
- It uses both data from ground monitors and satellite to make their assessments.

Key Findings:

- India has been recording an increase in PM 2.5 pollution since 2010 contrary to Centre's claims that annual air pollution levels are reducing in the country.
- India was followed by Nepal, Niger, Qatar and Nigeria in high PM 2.5 exposures. T
- It means people in India are exposed to the highest PM 2.5 concentrations globally.

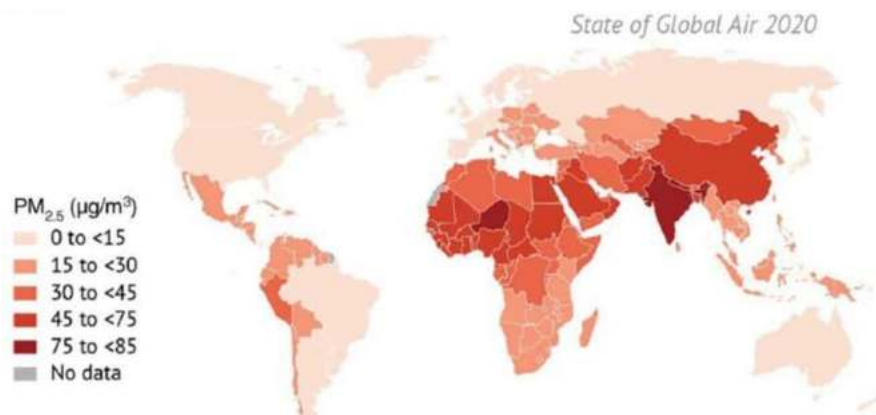


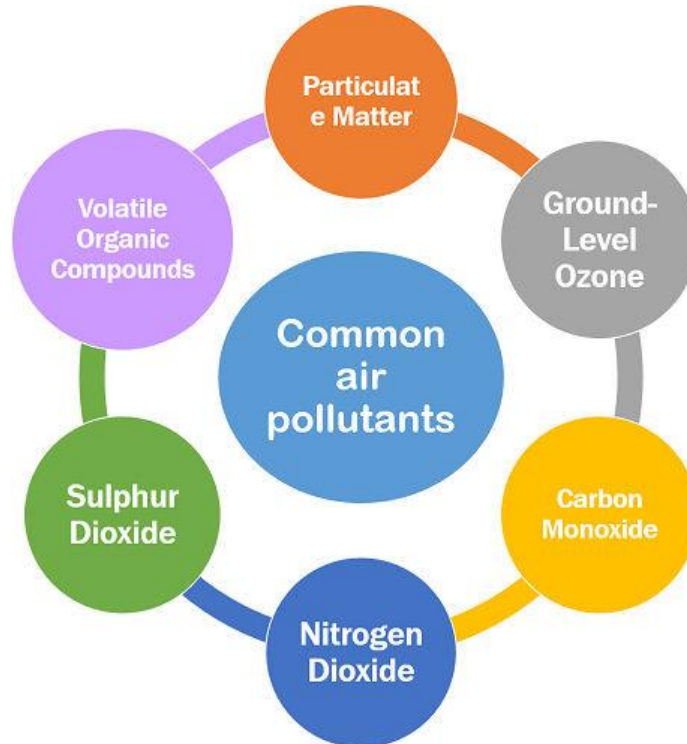
Fig.1 Global map of population-weighted annual average PM2.5 concentrations in 2019.

- Out of 87 health risk factors based on total number of deaths caused in 2019 assessed by the team, air pollution has the fourth highest risk globally preceded by high systolic blood pressure, tobacco and dietary risks.
- But in India, air pollution is the highest risk factor because of the huge burden of premature deaths it contributes to.
- India is also among the top ten countries with highest ozone (O₃) exposure in 2019. Qatar recorded the highest O₃ exposure followed by Nepal and India.
- Among the 20 most populous countries, India recorded the highest increase (17%) in O₃ concentrations in the past ten years.



Major Pollutants

- O₃ is a major respiratory irritant, which is not released directly into the air but is formed in a complex chemical interaction between nitrogen oxides (NO_x) and volatile organic compounds (VOCs) in the presence of sunlight.



- NO_x is emitted from the burning of fossil fuels (oil, gas, and coal) in motor vehicles, power plants, industrial boilers, and home heating systems.
- Volatile organic compounds are also emitted by motor vehicles, as well as by oil and gas extraction and processing and other industrial activities.

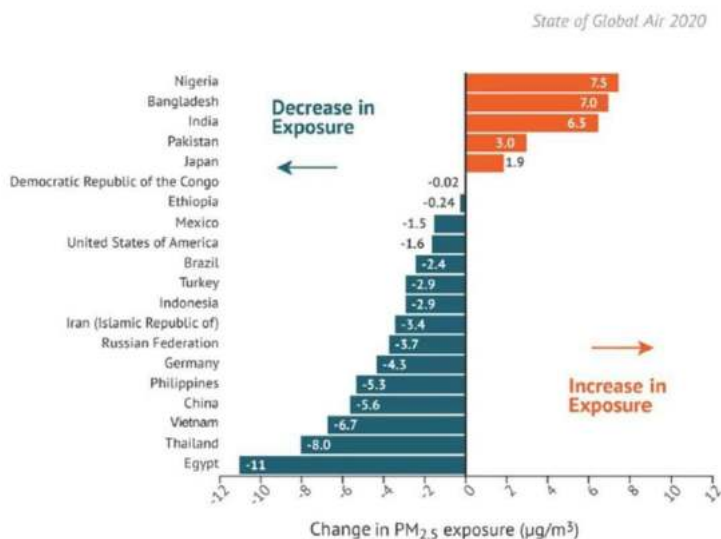


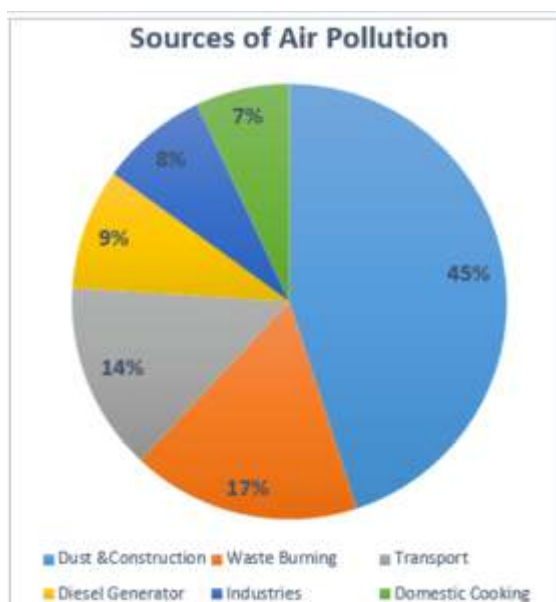
Fig 2: Change in population-weighted annual average PM_{2.5} exposure in the 20 most populous countries, 2010-2019.



Air pollution in India

- It is a serious health issue.
- Of the most polluted cities in the world, 21 out of 30 were in India in 2019.
- Air pollution contributes to the premature deaths of 2 million Indians every year.
- India has a low per capita emissions of greenhouse gases but the country as a whole is the third largest greenhouse gas producer after China and the United States.
- The Air (Prevention and Control of Pollution) Act regulate air pollution but has failed to reduce pollution because of poor enforcement of the rules.

Sources of Air Pollution in India



Measure taken:

- In 2015, Government of India, together with IIT Kanpur launched the National Air Quality Index.
- In 2019, India launched 'The National Clean Air Programme' with tentative national target of 20%-30% reduction in PM2.5 and PM10 concentrations by 2024, considering 2017 as the base year for comparison.
- The Pradhan Mantri Ujjwala Yojana Household LPG programme and other schemes have helped to dramatically expand access to clean energy, especially for rural households.
- Introduction of BS-VI emission standards are steps towards improving air quality.
- Construction of 1,600-kilometre-long and 5-kilometre-wide The Great Green Wall of Aravalli green ecological corridor along Aravalli range from Gujarat to Delhi which will also connect to Shivalik hill range with planting of 1.35 billion new native trees over 10 years to combat the pollution.
- Given the high exposure and staggering health burden of air pollution, India must show urgency and recognise air pollution as a regional-scale problem.
- It is critical that the efforts are continued and expanded over the next few years in order to see improvements in air quality. This will require concerted action at both at the national and state and local levels.



What can be done to advocate better air quality?

 <p>Provide clean cooking and heating stoves to rural communities</p>	 <p>Don't openly burn waste</p>
 <p>Use cleaner-burning fuels</p>	 <p>Prioritize the use of walking, cycling or rapid urban transit over private vehicles</p>
 <p>Switch to clean diesel and improved engines for transport and freight</p>	 <p>Ensure industries use clean technologies</p>
 <p>Have stricter vehicle emissions and efficiency standards</p>	 <p>Establish, adhere to and enforce air quality standards</p>
 <p>Switch from kerosene lamps to clean lighting technologies like solar lights</p>	 <p>Invest in renewable energy</p>
 <p>Stop emissions of climate pollutants such as black carbon, ozone and methane to save lives and help reduce global warming by 0.5C</p>	

<https://www.hindustantimes.com/india-news/india-recorded-highest-air-pollution-exposure-globally-in-2019-report/story-oOH8OTQEf276SyOvrYMXyH.html#:~:text=India%20recorded%20the%20highest%20annual,in%20high%20PM%202.5%20exposures.>

Other news

Frontier Technologies Cloud Innovation Centre

Context: In order to address societal challenges through digital innovation, NITI Aayog announced the establishment of a Frontier Technologies Cloud Innovation Centre (CIC) with Amazon Web Services, AWS.



Cloud Innovation Centre

- It is the first of its kind in India.
- This CIC is part of the AWS CIC Global Programme.
- It provides an opportunity for government agencies, non-profits and educational institutions, to come together on pressing challenges, apply design thinking, test new ideas, and access the technology expertise of AWS.
- CIC will be a great enabler to budding innovators and start-ups and help in piloting state-of-the-art, cloud-centric digital innovations by leveraging emerging technologies such as AI, IOT and robotics, blockchain.
- It is aligned to vision of an Atmanirbhar Bharat and support public sector mission in India.

<http://newsonair.com/News?title=NITI-Aayog-to-establish-Frontier-Technologies-Cloud-Innovation-Centre-with-AWS&id=402584>

First-ever SCO Startup Forum

Context: The first-ever SCO Startup Forum launched.

- The forum will lay the foundation for multilateral cooperation and engagement among the SCO Member States to develop and hone their startup ecosystems, collectively.
- Innovation and Startups will be the key focus area of SCO.
- The Forum shall identify areas of cooperation by launching multiple entrepreneurial activities like startup showcases through a dedicated virtual platform, mobilizing capital for startups, sharing of best practices, procuring social innovations, multilateral incubator programs and knowledge exchange workshops etc.
- It will aid to understand the cultural and economic features of the startup ecosystem in the SCO Member States.
- India is currently the third-largest startup ecosystem in the world with over 35,000 startups, close to 25% of which are core technology startups operating in areas of AI, Robotics, Cloud Computing, IoT, Digital Health, Financial & Education Technology.
- The 'Startup India' has launched 10 bilateral bridges since its inception and has helped many technology-based startups to expand their businesses to global markets.
- Government has roped in around 40 Indian missions to further augment the efforts undertaken by the 'Startup India' program by exploiting the opportunities across the geographies.

<http://newsonair.com/News?title=First-ever-SCO-Startup-Forum-to-be-launched-on-27th-October%2c-boost-for-%e2%80%98Startup-India%e2%80%99&id=402486>

Israel, Bahrain formally establish diplomatic ties

Context: Israel and Bahrain have formally established diplomatic relations after signing the US brokered deal in Arab country's capital Manama.

- Bahraini and Israeli officials signed eight bilateral agreements, including a joint communiqué on the establishment of diplomatic, peaceful, and friendly relations.
- The two countries are now expected to open embassies.



- Bahrain is now the fourth Arab country in the Middle East - after the UAE, Egypt and Jordan - to recognise Israel.

<http://newsonair.com/News?title=Israel%2c-Bahrain-formally-establish-diplomatic-ties-following-US-brokered-deal&id=402538>

UNAOC chief condemns beheading of teacher in northwestern suburbs of Paris in France

Context: The United Nations Alliance of Civilizations (UNAOC) has condemned the beheading of a teacher in the northwestern suburbs of Paris in France.

UNAOC

- The United Nations Alliance of Civilizations (UNAOC) is an initiative that seeks to galvanize international action against extremism through the forging of international, intercultural and interreligious dialogue and cooperation.
- The Alliance places a particular emphasis on defusing tensions between the Western and Islamic worlds.
- The initiative was first proposed by the Prime Minister of Spain, at the 59th General Assembly of the United Nations (UN) in 2005.
- It aims to bridge divides and promote harmony among the nations, all with a view toward preventing conflict and promoting social cohesion.

<http://newsonair.com/News?title=UNAOC-chief-condemns-beheading-of-teacher-in-northwestern-suburbs-of-Paris-in-France&id=402492>

‘Mission Shakti’ to tackle crime against women

Context: Uttar Pradesh government has launched a 6-month long women empowerment campaign ‘Mission Shakti’ to raise awareness and tackle crime against women in the state.

- Under Mission Shakti, different awareness and training programs will be conducted regarding various schemes for the protection, respect and self-reliance of women and girls.
- Women nodal officers have been appointed by government in all the districts for the execution and monitoring of the campaign.
- This campaign will definitely instill the feeling of security and respect in women .
- All efforts will be made that women are not afraid of coming out of their homes.
- Various competitive and cultural programmes on women empowerment awareness will also be connected during the campaign.

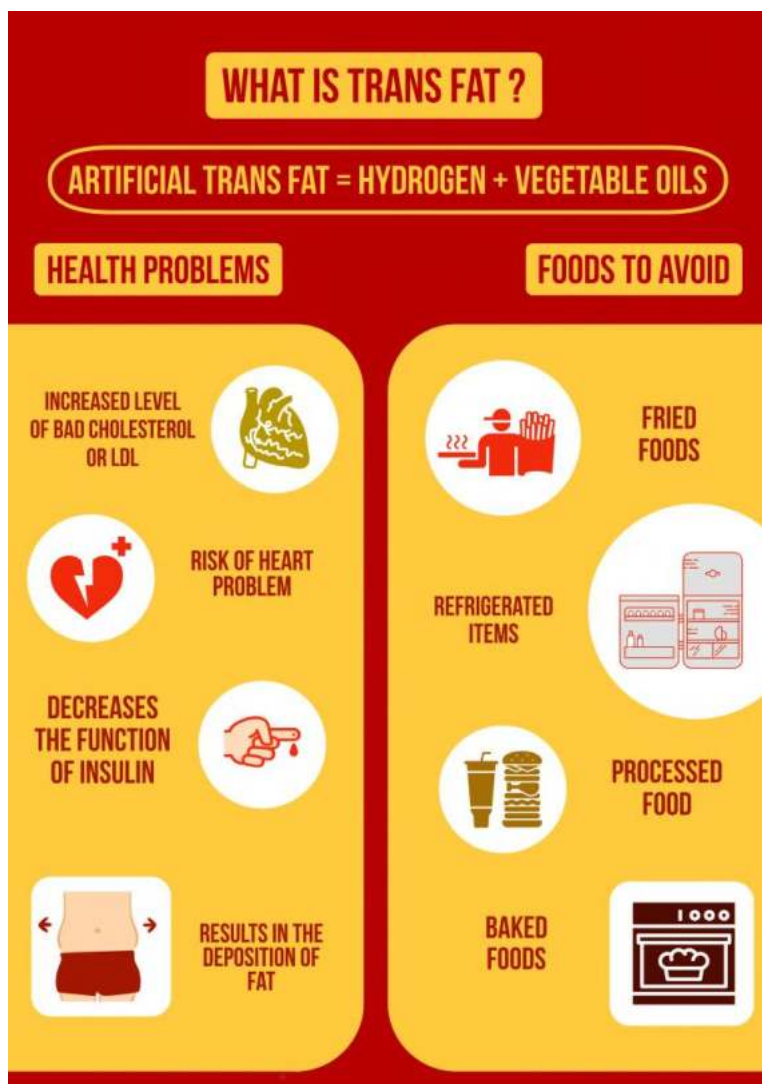
<http://newsonair.com/News?title=UP-government-launches-%e2%80%98Mission-Shakti%e2%80%99-campaign-to-tackle-crime-against-women&id=402483>

India Trans Fat free by 2022



Context: Government aim to make India Trans Fat free by 2022, a year ahead of target set by World Health Organization.

- On account of the Covid pandemic, there has been a renewed focus on food, nutrition, health, immunity and sustainability.
- This year is on elimination of Trans Fats from the food supply chain.
- Trans Fat, a food toxin present in Partially Hydrogenated Vegetable Oils, baked and fried foods, is a major contributor to the rise in non-communicable diseases in India.
- Trans Fat is a modifiable risk factor for cardiovascular diseases.



<http://newsonair.com/News?title=Aim-of-the-govt-is-to-make-India-Trans-Fat-free-by-2022%3a-Health-Minister&id=402363>