

Prelim Bits 08-10-2021 | UPSC Daily Current Affairs

Mosquirix

Mosquirix or RTS,S/AS01 (RTS.S), which was endorsed by the World Health Organisation (WHO) is the first and only vaccine shown to have the capability of significantly reducing malaria.

- This is the first malaria vaccine that has completed the clinical development process and acts against Plasmodium falciparum.
- Mosquirix provides short-term protection that could potentially save lives in the age group most at risk from malaria.
- Mosquirix also helps protect against infection of the liver with the hepatitis B virus but should not be used only for this purpose.
- The active substance in Mosquirix is made up of proteins found on the surface of the P. falciparum parasites and the Hepatitis B Virus.
- The vaccine thus limits the ability of the parasites to mature in the liver.
- Malaria is a life-threatening disease caused by parasites transmitted to people through the bites of infected female Anopheles mosquitoes and disease is preventable and curable.
- WHO has recommended that the RTS,S/AS01 malaria vaccine be used for the prevention of P. falciparum.

Air Quality

The Global Burden of Disease estimates that India lost 1.67 million lives in 2019 directly as a result of breathing polluted air.

- India's economic growth is built on fossil fuels. Coal, oil, and natural gas account for roughly 75% of our power generation come at the cost of heavy CO, SO₂, NO₂, ozone, and particulate matter emissions.
- The air quality in India is measured by Central pollution control board using National Air Quality Index.
- The mandate provided to the Central pollution control board under the Air (Prevention and Control of Pollution) Act 1981 empowers it to set standards for the quality of air.
- Poor air quality was found to counter 67% of the cost advantage of using solar panels over grid power, as ground-level smog and the particulate matter chokes their power output.
- Essential step is to expand the country's air quality monitoring network with low-cost monitors that capture readings for PM_{2.5} and 10 & gases like NO₂, SO₂, methane, and secondary volatile organic compounds.

State of the Education Report for India 2021

The UNESCO released the 2021 State of the Education Report for India: No Teachers, No Class.

- **Findings** - The gross enrolment ratio (GER) for elementary schools has increased from 81.6 in 2001 to 102.1 in 2019-2020.

- But the overall retention is 74.6% for elementary education and 59.6% for secondary education in 2019-20.
- **Number of Teachers** - 89% of the total 1.2 lakh single-teacher schools in the country are in rural areas.
- India needs 11.16 lakh additional teachers to meet the current shortfall.
- Tripura has the least number of women teachers, while Chandigarh leads the chart.
- The proportion of teachers employed in the private sector grew from 21% (2013-14) to 35% (2018-19).
- **Lack of Digital Infrastructure** - Overall availability of computing devices in schools is 22% for all India, with rural areas seeing much lower provisioning (18%) than urban areas (43%).
- Access to the internet in schools is 19% all over India - only 14% in rural areas compared to 42% in urban areas.
- There are a range of issues - lack of devices and Internet bandwidth for students, lack of preparedness of teachers in the use of technology, and lack of resources in Indian languages.
- **Recommendations** - The focus of this decade should be on teachers and teaching as the Quality of education is the core challenge of the next decade.
- As schools in India have not been functioning physically from March 2020, foundational learning is set to slide even further down from current low levels.

Source: The Hindu, The Indian Express, Down To Earth

