

NEWS TODAY

A COMPARISON OF ALL COVID-19 VACCINES THAT COULD BE AVAILABLE

- Comparison of vaccine approved in India

Vaccine	Type of vaccine	Dosage and time gap between doses	Storage and expiry	Efficacy
AstraZeneca (Covishield from Serum Institute of India i.e. SII - Pune)	Adenovirus vector platform	2 injections, 12-week gap	2 to 8 °C, 6 months	82.4% when the dosing interval is stretched to 12 weeks or more
CoVaxin (Bharat Biotech, Hyderabad)	inactivated whole virion platform	2 injections, 4-8 week gap	2 to 8 °C	81% at a four-week interval between two doses
Sputnik V (Gamaleya - Russia & Dr. Reddy's)	Adenovirus vector platform	2 injections, 21 days to 3 months	-18.55 °C (liquid form) and 2 to 8 °C (dry form)	91.6% efficacy

- Comparison of Vaccines which are not yet approved in India

Vaccine	Type of vaccine	Doses and cold chain	Safety	Efficacy
Johnson & Johnson	Adenovirus vector platform	Single dose and storage temperature of 2–8 °C (household refrigerator temperature)	Safe vaccine with mild-to-moderate side effects	66% protective against moderate to severe Covid infections overall from 28 days after injection
Pfizer-BioNTech	Genetic material or mRNA	2 full doses with a gap of 21 days and storage temperature of -70 °C	Safe vaccine with mostly mild-to-moderate side effects	95% after the second dose
Moderna	Genetic material or mRNA	2 full doses after a gap of 28 days and storage temperature of -20 °C	Safe vaccine with mostly mild-to-moderate side effects	94% after the second dose
Sinopharm and Sinovac	Inactivated vector	2 full doses and storage temperature of 2–8 °C	Safe with mostly mild-to-moderate side effects	Sinopharm – 79% Sinovac- 50%

CHINA ROCKET DEBRIS FALLS IN INDIAN OCEAN NEAR MALDIVES

- Parts of Long March 5B re-entered the atmosphere and landed in the Indian Ocean, with the bulk of its components destroyed upon re-entry into the Earth's atmosphere.

➤ Long March 5B was carrying components for the construction of China's space station, which will be completed by the end of next year.
 ➤ China's space station would be the second after the International Space Station (ISS)
 ➤ Russia has also announced its own space station.
 ➤ Last year, debris from another Chinese Long March rocket fell on Ivory Coast, damaging several buildings.

Space debris

➤ Space debris encompasses both natural (meteoroid) and artificial (man-made) particles. Meteoroids are in orbit about the sun, while most artificial debris is in orbit about the Earth.

➤ There are more than 500,000 pieces of debris, or "space junk," that orbit the Earth travelling at speeds up to 17,500 mph.

➤ Rising population of space debris increases the potential danger to all space vehicles, but especially to the International Space Station, space shuttles and other spacecraft with humans aboard.

➤ **Kessler Syndrome:** NASA space debris expert Don Kessler observed that, once past a certain critical mass, the total amount of space debris will keep on increasing: collisions give rise to more debris and lead to more collisions, in a chain reaction.

TECHNOLOGIES TO TACKLE SPACE DEBRIS

- Net capture:** It involves a net that will be deployed at the target CubeSat.
- Harpoon Capture:** Which will be launched at a target plate made of "representative satellite panel materials"
- Vision-based navigation:** Using cameras and LiDAR (light detection and ranging), the platform will send data about the debris back to the ground for processing.
- De-orbiting process:** As it enters Earth's atmosphere, the spacecraft will burn up, leaving no debris behind.

NGOs SEEK RELAXATION IN FOREIGN FUNDING RULES FOR NGOs AMID COVID CRISIS

- Foreign Contribution (Regulation) Amendment Act, 2020 aims to ensure greater transparency and effective monitoring of the inflow of foreign funds and the utilization for the activities set out in their registration.

Key provisions

- Certain persons are prohibited to accept any foreign contribution.
- Foreign contribution cannot be transferred to any other person unless such person is also registered to accept foreign contribution (or has obtained prior permission under the Act to obtain foreign contribution).
- It empowered the Centre to hold a "summary inquiry" and order a "violator" not to use foreign funding.
- NGOs were asked to register under FCRA to open an account at a specified branch of the State Bank of India (SBI) by March 31, 2021.
- Limit of administrative expenses was reduced from 50 per cent to 20 per cent.
- How relaxation will help NGOs fight COVID
 - Country's NGOs can utilise foreign funding and donations to help Covid-19 patients during the nationwide public health emergency.
 - Help to supply medical and logistical aid to smaller NGOs in rural and semi-urban areas.
 - Help to pay urgent salaries of staff associated with NGOs

INDIA, EUROPEAN UNION TO RESUME FTA NEGOTIATIONS AFTER 8 YEARS

The talks for **Bilateral Trade and Investment Agreement (BTIA)**, which began in 2007, have been deadlocked since 2013 over issues including tariffs, market access and data security status etc.

- Concerns in INDIA-EU BTIA**

EU's demands

Significant duty cuts in automobiles, tax reduction on wines, spirits etc, a strong intellectual property regime, relaxation in India's data localisation norms, protection to all its items with Geographical Indication etc.

India's demands

Data secure status (important for India's IT sector); Ease norms on temporary movement of skilled workers, relaxation of Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) norms etc.

- Other major outcomes of the meet**

- > Adopted a **Connectivity Partnership document** outlining plans to cooperate on digital and infrastructure projects.
- > Signed contract for second tranche of \$150 million for **Pune Metro rail project**.
- > Decided to kick-start negotiations for agreements on **investment protection and geographical indications**.
- > Announced a **dedicated dialogue on WTO issues, regulatory cooperation, market access issues and supply chain resilience**, demonstrating the desire to deepen and further diversify economic engagement.
- EU is strategically important for India, and EU as a whole was India's **largest trading partner in 2018** with bilateral trade USD 115.6 billion in 2018-19.
- > EU wants to **diversify its value chain away from China to India** and hence there is interest on its part also to have a trade deal with India.

INDIA PARTICIPATES IN THE 3rd ARCTIC SCIENCE MINISTERIAL (ASM3)

• ASM 3 is **jointly organised by Iceland and Japan**, is the **first Ministerial meeting being held in Asia** to highlight the value of Arctic science research conducted by non-Arctic States.

> ASM1 and ASM2 were held in the USA in 2016 and Germany in 2018, respectively.

• **Objective-** To provide opportunities to various stakeholders, including academia, indigenous communities, governments and policymakers, to enhance collective understanding of the Arctic region, emphasize and engage in constant monitoring, and strengthen observations.

- India's engagement with Arctic**

> India enjoys 'Observer' status in the Arctic Council since 2013

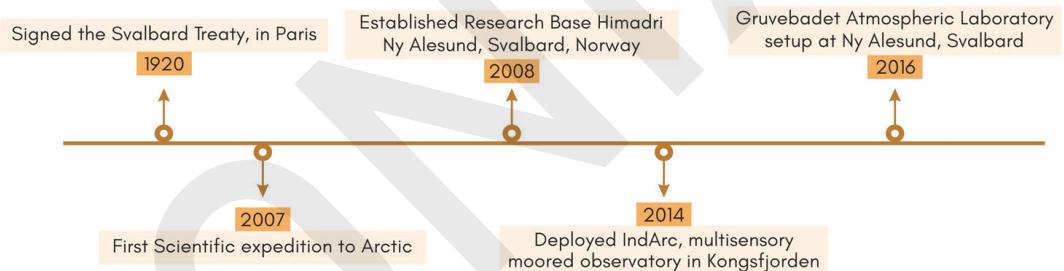
» Arctic council is a **high-level intergovernmental forum for Arctic cooperation** that was set up with the twin-mandate of **environmental protection and sustainable development**.

» **Member state:** Canada, Denmark, Finland, Russia, US, Iceland, Norway, Sweden

> Recently released a **draft Arctic Policy document** that outlines five pillars of India's Arctic policy: **scientific research, economics and human development; connectivity; global governance and international cooperation; and development of Indian human resource capabilities**.

• **Arctic region** refers to the region above the Arctic Circle, north of latitude 66° 34' N, which **includes Arctic Ocean with North Pole at its centre**.

India And The Arctic - A History of Cooperation



ALSO IN NEWS

2-deoxy-D-glucose (2-DG)	<ul style="list-style-type: none"> Drugs Controller General of India (DCGI) has approved anti-COVID oral drug 2-DG developed by the Institute of Nuclear Medicine and Allied Sciences (INMAS), a leading laboratory of DRDO, in collaboration with Dr. Reddy's Laboratories (DRL) in Hyderabad. > It accumulates in the virus-infected cells and prevents virus growth by stopping viral synthesis and energy production. Its selective accumulation in virally infected cells makes this drug unique. > It helps in faster recovery of hospitalised patients and reduces supplemental oxygen dependence.
Black fungus (Mucormycosis)	<ul style="list-style-type: none"> It is a rare serious fungal infection that has been observed in a number of Covid-19 patients recently. It often manifests in the skin and also affects the lungs and the brain. It is caused by a group of moulds known as mucormycetes present naturally in the environment. It mainly affects people who are on medication for health problems that reduces their ability to fight environmental pathogens. Warning signs of the disease include pain and redness around the eyes or nose, with fever, headache, coughing, shortness of breath, bloody vomits, and altered mental status.
Hakki Pikkis Tribe	<ul style="list-style-type: none"> Hakki Pikkis are a nomadic tribe which migrated from Northern India and now mainly settled in Karnataka region and other South Indian states. They are known as Bird Catcher (Hakki means Bird and Pikki means catcher in Kannada language) They speak Indo Aryan language named as 'Vaagri' by scholars. > UNESCO has listed Hakkipikki is one of the endangered languages. Today, they are mainly engaged in selling of herbal products like herbal oils.
Maharana Pratap	<ul style="list-style-type: none"> He was the ruler of Mewar, a province in modern day Rajasthan. He was the eldest son of Uday Singh II, founder of Udaipur. Chetak was the loyal horse of Rana Pratap with whom he shared a deep bond. His army lost to Mughals in battle of Haldighati.