

India-Finland Relations

For Prelims: Quantum Computing, Sustainable Energy Technologies, Electric Vehicles, Cyber-Physical System, Quantum Technologies, Future Manufacturing, Green Hydrogen Fuel

For Mains: Bilateral Groupings & Agreements, Effect of Policies & Politics of Countries on India's Interests, India-Finland Relations, Bilateral Groupings & Agreements

Why in News?

Recently, Finland's Minister of Economic Affairs met India's Union Minister of State Science & Technology.

- They announced the decision to establish an Indo-Finnish Virtual Network Centre on Quantum Computing.
- The Indian side has identified three premier institutes viz IIT Madras, IISER Pune and Centre for Development of Advanced Computing (C-DAC) Pune for Virtual Network Centre on Quantum Computing.



What are the Highlights of the Meeting?

- India is keen to develop research collaborations with Finnish R&D institutions and technology collaboration with Finnish Industry especially focusing on the following technology domains and application of Quantum Computing in areas such as:
 - Sustainable Energy Technologies (generation, conversion, storage and conservation),

Environment and Clean Technologies,

- Biobased Economy, <u>BioBanks</u> and Biobased materials for different applications,
- Water and Marine Technologies,
- Food & Agri Technologies,
- Affordable Healthcare (including, Pharmaceuticals and Biomedical Instrumentation),
- Technologies for <u>Advanced Manufacturing</u>, Integration of <u>Artificial Intelligence and Machine Learning</u> in all domains.
- The <u>Department of Science & Technology</u> has initiated several new mission mode programs like <u>Electric Vehicles</u>, <u>Cyber-Physical System</u>, <u>Quantum Technologies</u>, <u>Future</u> <u>Manufacturing</u>, <u>Green Hydrogen Fuel</u> etc and sought joint collaboration with Finland in solving issues of societal challenges.
- The visiting Finnish Minister assured that Finnish companies will partner with India for Carbonneutral technologies and enhance **cooperation for** <u>Sustainability in Climate Change</u>.
- The Finnish Minister also invited India to explore the possibility of deeper cooperation in Finland's Biobank project to mediate high-quality human samples for medical research to promote the development of new products and services that promote public health.

What is the History of India-Finland Relations?

- Background: Finland and India have traditionally enjoyed warm and friendly relations.
 - In recent years, bilateral relations have acquired diversity with collaboration in research, innovation, and investments by both sides.
 - 2019 marked 70 years of diplomatic relations between the two countries.
- Each Other's Importance: Finland sees India as a market for its products and a favourable investment destination for its high technology industries.
 - India views Finland as an important member of the <u>European Union</u> and a repository of modern technology.
- S&T Collaboration: India and Finland have strong bonding in Science, Technology and Innovation.
 - Both India and Finland are consultative members of the <u>Antarctic Treaty</u> and have active stations in Antarctica.
 - Finland would be hosting the **Antarctic Treaty Consultative Meeting (ATCM)** in 2023 and India in 2024.
 - India Meteorological Department (IMD) and the Finnish Meteorological Institute (FMI) have been cooperating in the field of Atmospheric Environment since 2014.
 - Under this collaboration, Air Quality Forecasting models developed by FMI are
 customised for the Indian region resulting in the enhanced capability to forecast
 pollution events from microscale to regional scale so that pollution control
 authorities can take appropriate action.
 - Finland is a leader in <u>5G/6G technology</u> and Top Indian IT companies are looking to collaborate in this sector.
- Economic and Commercial Relations:
 - In 2020, India's total trade (goods and services) with Finland was USD 2.3 billion which is in India's favour.
 - Trade-in goods in 2020 were approximately USD 950 mn and were in Finland's favour by approximately USD 134 million.
 - Finland's top imported goods from India (Jan-Dec 2020):
 - Medicinal, pharmaceutical products
 - Articles of apparel and clothing accessories
 - Textile yarn, fabrics, made-up articles
 - · Manufactures of metals
 - Electric machinery and parts
 - India's top imported goods from Finland (Jan-Dec 2020):
 - Machinery for special industries
 - Electric machinery and parts
 - Paper, paperboard and articles thereof
 - Metalliferous ores and metal scrap
 - General industrial machinery
- Cultural Relations:

- Finland is very **receptive to Indian culture.**
- There are several Indian dance schools and Yoga schools.
- Cultural events are organised regularly by Indian Associations and other cultural organisations promoting Indian dance and music (both classical as well as contemporary).
- Finnish India Society has been active since 1956.

Source: PIB

