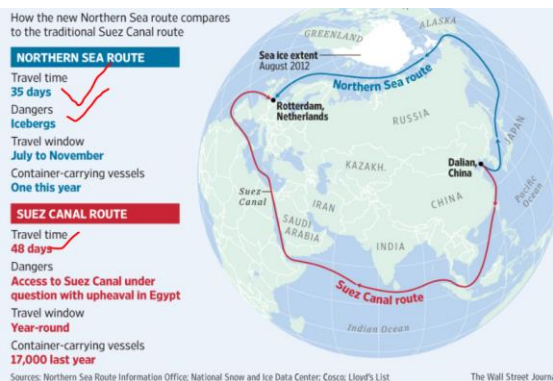


National sea route



- Murmansk, popularly called the capital of the Arctic region and the beginning point of the Northern Sea Route (NSR), is witnessing the rising trend of Indian involvement in cargo traffic.
- In the first seven months of 2023, India got the lion's share with 35% of eight million tonnes of cargo handled by the Murmansk port, which is about 2,000 km northwest of Moscow.
- India has been showing greater interest in the NSR for a variety of reasons.

Why is the Arctic region significant to India?

- The vulnerability of the Arctic region, which is above the Arctic Circle and includes the Arctic Ocean with the North Pole at its center, to unprecedented changes in the climate may have an impact on India in terms of economic security, water security, and sustainability.

- The region also constitutes the largest unexplored prospective area for hydrocarbons remaining on the Earth.
- "It is estimated that the region may hold over 40 percent of the current global reserves of oil and gas.
- There may also be significant reserves of coal, zinc, and silver."

How old is India's engagement with the Arctic?

- India's engagement with the Arctic can be traced to the signing of the Svalbard Treaty in February 1920 in Paris and India is undertaking several scientific studies and research in the Arctic region.
- This encompasses atmospheric, biological, marine, hydrological, and glaciological studies.
- Apart from setting up a research station, Himadri, at Ny-Alesund, Svalbard, in 2008, the country launched its inaugural multisensory moored observatory and northernmost atmospheric laboratory in 2014 and 2016 respectively.

What is NSR?

- The Northern Sea Route (NSR), the shortest shipping route for freight transportation between Europe and countries of the Asia-Pacific region,

straddles four seas of the Arctic Ocean.

- Running 5,600 km, the route begins at the boundary between the Barents and the Kara Seas (Kara Strait) and ends in the Bering Strait (Provideniya Bay).

How is Russia making the NSR navigable?

- As the seas of the Arctic Ocean remain icebound during most of the year, icebreaking assistance is organized to ensure safe navigation along the NSR.
- Russia is the only country in the world with a nuclear-powered icebreaker fleet, according to Rosatom State Nuclear Energy Corporation, the NSR infrastructure operator.
- In December 1959, the world's first nuclear icebreaker, "Lenin," was put into operation, unveiling the new chapter in the NSR development. It was decommissioned 30 years later.
- Today, FSUE Atom lot, a subsidiary of Rosatom, acts as the fleet operator of nuclear- powered icebreakers.

What are the driving factors for India to participate in the NSR development?

- With India increasingly importing crude oil and coal from Russia in recent years, Rosatom says that "the record supplies of energy resources for the Indian economy are possible due to such a reliable and safe transport artery as the NSR."
- Secondly, the NSR assumes importance, given India's geographical position and the major share of its trade associated with sea transportation.
- Thirdly, the Chennai Vladivostok Maritime Corridor (CVMC) project, an outcome of the signing of the memorandum of intent between the two countries in September 2019, is being examined as one linking with another organized international container transit through the NSR.
- The 10,500 km-long CVMC, passing through the Sea of Japan, the South China Sea, and Malacca Strait, will bring down transport time to 12 days, almost a third of what is taken under the existing St. Petersburg Mumbai route of 16,000 km.
- A study commissioned by Chennai Port Trust reveals that coking coal [used by steel companies], crude oil, Liquefied Natural Gas (LNG), and fertilizers are some of the cargo that can be imported from Russia to India through CVMC.

BRICS Expansion

- The choice of countries, bringing in four major players from the West Asian region Egypt, Iran, Saudi Arabia, and the UAE apart from Ethiopia and Argentina from Africa and South America is significant, as it denotes a shift in the non-western economic grouping's underpinnings, to make it a more politically relevant block.
- While India may not have been in favor of such a rapid expansion, officials have said it took the lead in drafting the criteria for membership, and the fact that most of the new members are strategic partners of India is the result of India's efforts.
- The induction of Iran into BRICS sends a further message against U.S. sanctions, just as Iran's induction into the SCO this year.

THE HINDU

Upcoming Lunar mission

- There are four more lined up for this year.
- They include the Commercial Lunar Payload Services (CLPS) and Lunar Trailblazer from the U.S...
- The CLPS initiative of the National Aeronautics and Space Administration, according to the U.S. space agency, allows rapid

acquisition of lunar delivery services from American companies for payloads that advance capabilities for science, exploration, or commercial development of the moon.

- The Lunar Trailblazer on the other hand is an orbiter.
- The moon missions include China's lunar communication and navigation satellite constellation and Japan's Smart Lander for Investigating Moon (SLIM), which is an orbiter/lander mission.
- This year also saw another failure as Japan's Hakuto-R lander failed to make a moon landing in April.
- Had the Hakuto-R mission completed its task, it would have been the world's first commercial soft landing on the lunar surface.
- As of July, there are six active lunar orbiters, and currently, the only operating rover is China's Yutu-2 rover released by Chang'e 4, which operates on the far side.
- Next year, Beresheet 2 from Israel, U.S.'s Volatiles Investigating Polar Exploration Rover (VIPER), China's Lunar Exploration Programme (CLEP) Chang'e 6 and Hakuto-II are expected to be launched.

THE HINDU

National awards

Opening credits

The jury for the 69th National Film Awards picked a slew of winners for 2021 from around 430 applications on feature, non-feature and best writing on cinema

- Best direction: **Nikhil Mahajan** for *Godavari* (*The Holy Water*)
- Best supporting actor (male): **Pankaj Tripathi** for *Mimi*
- Best supporting actor (female): **Pallavi Joshi** for *The Kashmir Files*
- Nargis Dutt Award for Best Feature Film on National Integration: *The Kashmir Files*
- Best film on social issues: **Anunaad - The Resonance**
- **Indira Gandhi Award for Best Debut Film of a Director**: **Vishnu Mohan** for *Meppadiyan*
- Best child artist: **Bhavin Rabari** for *Last Film Show* (*Chhello Show*)
- Special jury award: **Vishnu Varadhan** for *Shershaah*



■ Award for best popular film providing wholesome entertainment: *RRR*

■ Best feature film: *Rocketry: The Nambi Effect*



■ Best actor (female): **Alia Bhatt** for *Gangubai Kathiawadi* and **Kriti Sanon** for *Mimi*

■ Best actor (male): **Allu Arjun** for *Pushpa: The Rise*

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