

3. India-Netherlands Strategic Partnership – Strengthening Bilateral Cooperation – Science & Technology

1. Why in News

1. PM Narendra Modi's five-nation visit covering Netherlands, Sweden, Norway, Nordic partners
2. India and Netherlands upgraded ties to Strategic Partnership
3. 17 Memorandums of Understanding (MoUs) signed across sectors
4. Major Tata Electronics-ASML semiconductor fabrication cooperation agreement
5. Netherlands returned Chola-era Anaimangalam copper plates after 14-year diplomatic effort
6. Third India-Nordic Summit participation (Norway, Sweden, Finland, Denmark, Iceland)
7. PM Modi conferred Sweden's highest civilian honour – "Royal Order of Polar Star Commander Grand Cross"

2. About Strategic Partnership

Definition

1. Formalized, long-term diplomatic relationship between sovereign states or international organizations
2. Focused on advancing shared long-term interests
3. Comprehensive engagement across multiple sectors
4. Institutional mechanisms for regular consultations

3. About India-Netherlands Relations

Historical Origin

1. Bilateral ties date back to 17th century
2. Dutch East India Company established commercial links with India
3. Diplomatic relations formally established after India's independence in 1947
4. Centuries-old historical connections

Nature of Relations

1. Strong bilateral relations based on trade, technology, water management, agriculture, renewable energy, cultural cooperation
2. Multifaceted engagement across economic, strategic, technological domains

4. Key Areas of Cooperation

Water Management and Climate Resilience

1. Netherlands supports India in flood control, river rejuvenation, sustainable water management
2. Dutch technical expertise in hydraulic engineering
3. Experience with delta management, coastal protection
4. Climate adaptation strategies
5. Urban water systems and drainage

Renewable Energy and Green Transition

1. Cooperation in renewable energy, green hydrogen, sustainable infrastructure
2. Recent MoUs strengthened collaboration in clean energy and critical minerals
3. Offshore wind technology
4. Solar energy innovations
5. Energy storage solutions

Semiconductor and High Technology Cooperation

1. Emerged as major pillar of relations
2. Tata Electronics-ASML partnership – Semiconductor fabrication cooperation
3. ASML – World leader in advanced lithography systems for chip manufacturing
4. Advanced manufacturing, innovation, digital technologies
5. Critical for India's semiconductor ecosystem development

Agriculture and Food Processing

1. Collaboration in agricultural technology
2. Food processing innovations
3. Sustainable farming practices
4. Horticulture, dairy technology
5. Precision agriculture

Maritime and Logistics Cooperation

1. Netherlands supports India's port modernization
2. Logistics infrastructure development
3. Dutch expertise in maritime trade systems
4. World-class port operations (Rotterdam model)
5. Inland waterways development

5. Economic Dimensions

Strong Bilateral Trade

1. Bilateral trade exceeded nearly USD 27 billion in 2023-24
2. Netherlands among India's largest export destinations in Europe
3. Accounts for over 5% of India's merchandise exports
4. Gateway to European markets

Key Indian Exports

1. Petroleum products (refined)
2. Pharmaceuticals
3. Chemicals
4. Machinery
5. Textiles
6. Gems and jewellery

Foreign Investment Partner

1. Netherlands among leading foreign investors in India
2. Sectors - Logistics, technology, renewable energy, manufacturing
3. Netherlands ranks 4th largest overall Foreign Direct Investment (FDI) investor in India
4. Cumulative inflows exceeding USD 55 billion since 2000
5. Favourable tax treaty (though under review)

6. People-to-People Connections

Indian Diaspora Presence

1. Netherlands home to second-largest Indian diaspora in Europe (after UK)
2. Population exceeding 240,000
3. Two main groups -
 1. Historically established Indo-Surinamese (Hindustani) community - Descendants of indentured labourers from colonial period
 2. Rapidly growing modern Indian expatriates and international students - Recent migration for education and employment
4. Active community organizations
5. Cultural festivals and celebrations

7. Cultural and Heritage Cooperation

Return of Chola-Era Artefacts

1. Netherlands returned Chola-era Anaimangalam copper plates (Leiden Plates)
2. After 14-year diplomatic effort
3. Reflects increasing collaboration in cultural preservation
4. Repatriation of heritage artefacts

5. Growing cultural diplomacy

Other Cultural Links

1. Museum collaborations
2. Academic exchanges
3. Art and cultural festivals
4. Language promotion programs

8. Recent Memorandums of Understanding (17 MoUs)

Sectors Covered

1. Water management
2. Agriculture
3. Health
4. Renewable energy
5. Semiconductors (major Tata-ASML agreement)
6. Mobility (electric vehicles, sustainable transport)
7. Critical minerals

9. Potential Significance of Recent MoUs

Strengthening India's Semiconductor Ecosystem

1. Semiconductor agreements support India's objective becoming global electronics and chip manufacturing hub
2. ASML technology critical for advanced chip production
3. Reducing dependence on imports
4. Building domestic manufacturing capacity
5. Aligns with India Semiconductor Mission

Enhancing Energy Security and Sustainability

1. Cooperation in renewable energy and critical minerals strengthens clean energy transition
2. Reduce import dependence (lithium, cobalt, rare earths)
3. Accelerate renewable capacity addition
4. Green hydrogen development
5. Meet climate commitments (NDC targets, net-zero 2070)

Boosting Technological Self-Reliance

1. Partnerships in advanced technology and innovation support Atmanirbhar Bharat vision
2. Technology transfer and localization
3. R&D collaboration
4. Innovation ecosystem development
5. Skill development in emerging technologies

Expanding Strategic Presence in Europe

1. Strategic Partnership strengthens India's engagement with Europe
2. Amid evolving geopolitical realignments (Russia-Ukraine, US-China tensions)
3. Supply-chain diversification (China+1 strategy)
4. Access to European markets and technologies
5. Counterbalancing Chinese influence

Improving Climate and Water Governance

1. Dutch expertise in water management supports India's climate adaptation
2. Flood mitigation (especially riverine and coastal areas)
3. Urban sustainability initiatives (smart cities, water-sensitive urban design)
4. Lessons from Netherlands' delta management
5. Integrated water resources management

Deepening Cultural Diplomacy

1. Return of Chola-era artefacts strengthen cultural diplomacy
2. Global efforts for repatriation of heritage objects
3. Soft power projection
4. Civilizational connections

10. India-Nordic Engagement

Third India-Nordic Summit

1. Participation – Norway, Sweden, Finland, Denmark, Iceland
2. Platform for collective engagement with Nordic countries
3. Shared values – Democracy, rule of law, sustainability
4. Cooperation areas – clean energy, climate action, innovation, digitalization
5. Arctic cooperation potential

Swedish Honour to PM Modi

1. "Royal Order of Polar Star Commander Grand Cross" – Sweden's highest civilian honour
2. Recognizing efforts to strengthen bilateral relations
3. Symbol of deepening India-Sweden ties

11. Way Forward

Institutionalize Cooperation

1. Regular ministerial-level dialogues
2. Joint working groups across sectors
3. Business councils and chambers
4. Academic and research partnerships

Expand Trade and Investment

1. Bilateral investment protection agreements
2. Remove non-tariff barriers
3. India-EU Free Trade Agreement negotiations (Netherlands supportive)
4. Promote SME collaboration

Deepen Technology Partnerships

1. Joint R&D in semiconductors, AI, quantum computing
2. Innovation hubs and technology parks
3. Startup ecosystems collaboration
4. Intellectual property cooperation

Climate and Sustainability Cooperation

1. Joint climate finance initiatives
2. Green technology transfer
3. Circular economy models
4. Sustainable urban development

People-to-People Exchanges

1. Student mobility programs
2. Cultural festivals and exhibitions
3. Tourism promotion
4. Language and educational exchanges

12. Conclusion

India-Netherlands Strategic Partnership reflects growing convergence between economic cooperation (USD 27 billion bilateral trade, USD 55 billion cumulative FDI), technological collaboration (Tata-ASML semiconductor agreement strengthening India's chip manufacturing), cultural diplomacy (Chola-era copper plates return after 14-year effort), and geopolitical priorities. 17 MoUs across water management, agriculture, health, renewable energy, semiconductors, mobility, critical minerals demonstrate comprehensive engagement. Netherlands' expertise in water management, maritime



logistics, semiconductor technology, renewable energy crucial for India's development goals. Strategic Partnership strengthens India's European presence, supports Atmanirbhar Bharat, enhances energy security, improves climate governance, and deepens cultural connections with 240,000-strong Indian diaspora. Third India-Nordic Summit and Swedish civilian honour to PM Modi further consolidate India's Nordic engagement.

Source - <https://www.thehindu.com/news/national/narendra-modi-five-nation-tour-live-updates-uae-netherlands-sweden-norway-italy-trade-investment-west-asia-crisis/article70989625.ece>