

“Don't let yesterday take up too
much of today.”

Will Rogers



Important Issues of the Day

- **Nutrition – GS 3**
- **International Space Station – GS 3**
- **Export Preparedness Index – Prelims**
- **Shaksgam Valley – GS 2**
- **Global Risk Report – Prelims**

The importance of iron in nutrition TH Premium

Iron deficiency in the population is a serious problem that can affect the growth and development of children and people's general health, with studies showing a significant reduction of the work output in populations that are iron deficient

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- **Iron is quantitatively the most important element in all living organisms because of its role in oxygen transport and storage by haemoglobin; in energy metabolism and in cellular growth and proliferation.**
- **A normal adult male has 50 mg/kg of iron, while females have 40 mg/kg: and most of this iron is in haemoglobin which is essential to carry oxygen from the lungs to the tissues.**
- **The main source of iron is in the food we eat, with males requiring 10 mg of iron daily in the diet of which only 1 mg is absorbed, while females need double the amount to compensate for menstrual blood loss.**

- **Non-vegetarian sources of iron are better absorbed, but a diet which contains millets, unpolished rice, milk or curd, pulses and leafy vegetable can provide adequate iron. However, this needs to be supplemented in pregnancy.**
- **When the body's iron is depleted, there is a fall in haemoglobin (Hb), and the red cells become smaller (MCV: normal 80-100).**
- **A fall in Hb results in weakness, shortness of breath and palpitations on walking. In children who are chronically deficient in iron, growth can be retarded.**
- **Nutritional: Inadequate intake of iron in the diet (in rare cases failure to absorb oral iron).**

- **Blood loss:** In females who have heavy periods, iron can be depleted. Gastrointestinal blood loss can also cause iron deficiency and older patients must be evaluated for malignancy of the stomach or colon.
- **Once the diagnosis has been confirmed and the cause established, the cause must then be treated, and iron replacement therapy started. Iron can be supplemented orally or by intravenous injection.**
- **Iron replacement should continue for at least three months to build up iron stores in the body. Some patients develop nausea, vomiting or constipation with oral iron and for these patients, the iron is given intravenously.**
- **Patients usually start feeling better and the Hb begins to rise one month after starting treatment.**

- **In India, iron deficiency was recognised as a public health problem in children and in women who are pregnant or lactating.**
- **Therefore, the government of India started the National Nutritional Evaluation Programme (NNAEP) in which iron supplements were provided to children and pregnant and lactating women.**
- **This programme was funded by UNICEF but an evaluation of this programme by the Indian Council of Medical Research (ICMR) showed poor compliance by the beneficiaries.**
- **Iron deficiency in the population is a serious problem that can affect the growth and development of children and people's general health, with studies showing a significant reduction of the work output in populations that are iron deficient. In the West, most infant formulas and breakfast cereals are supplemented with iron.**

- **The body does not have a mechanism to excrete increased iron: the maximum daily excretion of iron is only one mg.**
- **One blood transfusion loads the patient with about 200 mg of iron, so children with thalassemia who need regular blood transfusions require treatment to remove the excess iron which can damage the liver, heart and the endocrine system.**
- **This is done with medicines called chelators, which can be given subcutaneously with a small pump (desferal) or orally, deferoxamine.**
- **The body's iron stores are monitored by checking serum ferritin every six months and with a T2* MRI once a year. In rare patients, there is a genetic condition which results in increased body iron stores: this is known as haemochromatosis.**

With reference to pre-packed items in India, it is mandatory to the manufacturer to put which of the following information on the main label, as per the Food Safety and Standards (Packaging and Labelling) Regulation, 2011?

- 1. List of ingredients including additives**
- 2. Nutrition information**
- 3. Recommendations, if any, made by the medical profession about the possibility of any allergic reaction**
- 4. Vegetarian/non-vegetarian**

Select the correct answer using the codes given below:

- (a) 1, 2 and 3 only**
- (b) 2, 3 and 4 only**
- (c) 1, 2 and 4 only**
- (d) 1 and 4 only**

Mains Question

“Despite multiple nutrition-focused schemes, India continues to face a high burden of malnutrition and micronutrient deficiencies.”

Critically examine the structural and implementation challenges in India’s nutrition governance. Suggest measures to ensure outcome-oriented nutritional security.

(250 Words / 15 Marks)

“पोषण से जुड़ी अनेक योजनाओं के बावजूद भारत आज भी कुपोषण और सूक्ष्म पोषक तत्वों की कमी की गंभीर समस्या से जूझ रहा है।”

भारत की पोषण व्यवस्था में मौजूद संरचनात्मक और क्रियान्वयन संबंधी चुनौतियों का समालोचनात्मक परीक्षण कीजिए। परिणामोन्मुख पोषण सुरक्षा सुनिश्चित करने के उपाय सुझाइए।

(250 शब्द / 15 अंक)

SpaceX capsule with four ISS astronauts splashes down on Earth safely after first-ever medical evacuation

The Crew-11 quartet arrived at the ISS in early August and had been scheduled to stay onboard the space station until they were rotated out in mid-February with the arrival of the next crew

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AGENCIES



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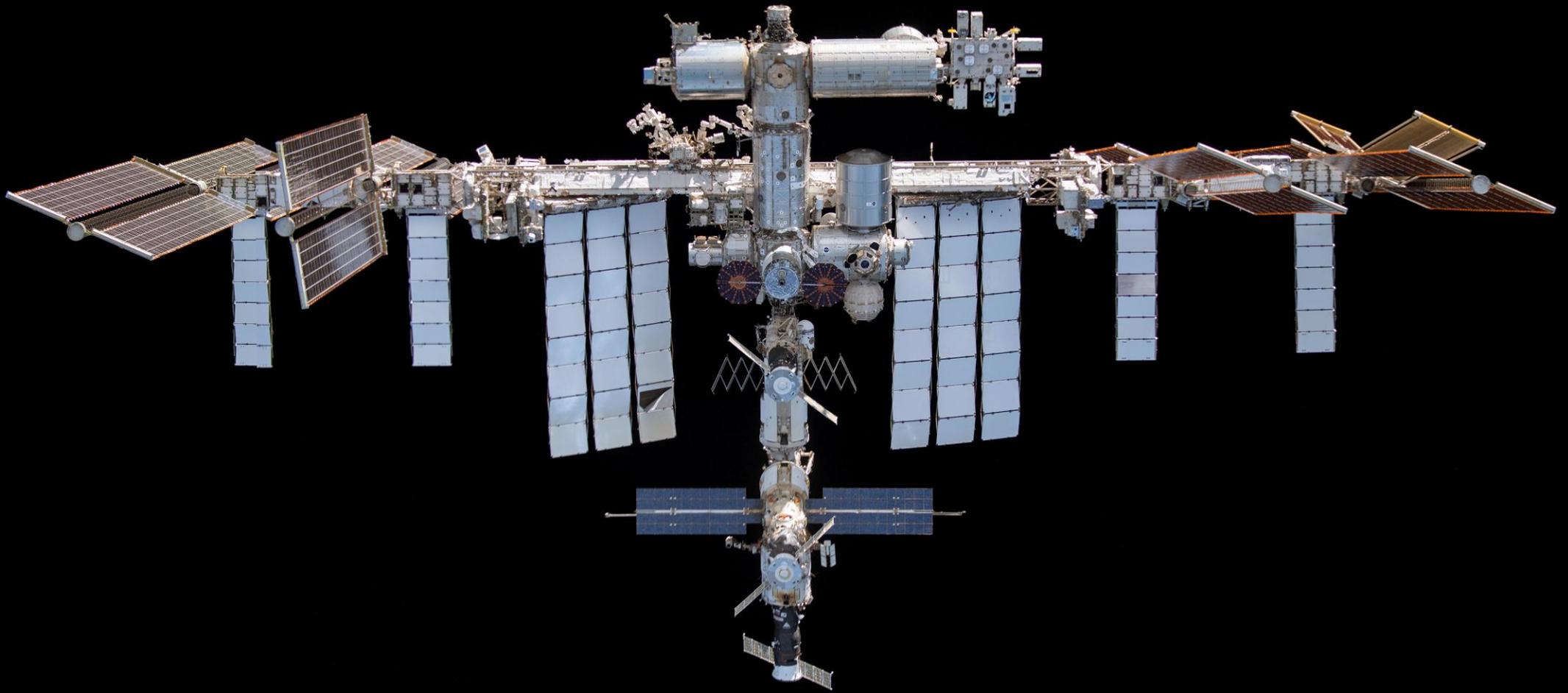


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- **Four International Space Station crew members splashed down in the Pacific Ocean on Thursday (January 15, 2026), NASA footage showed, after the first ever medical evacuation in the orbital lab's history.**
- **A health issue prompted their mission to be cut short, after spending five months in space. The U.S. space agency has declined to disclose any details about the health issue but stressed the return was not an emergency situation.**
- **Crew-12 is expected to launch to the space station in mid-February with four more astronauts.**
- **In the meantime, the orbiting laboratory remains occupied by NASA astronaut Christopher Williams and two cosmonauts who flew to the ISS aboard a Russian Soyuz spacecraft in November.**

- **Continuously inhabited since 2000, the International Space Station seeks to showcase multinational cooperation, bringing together Europe, Japan, the United States and Russia.**
- **Located some 400 kilometers (248.5 miles) above Earth, the ISS functions as a testbed for research that supports deeper space exploration — including eventual missions to return humans to the Moon and onward to Mars.**
- **The ISS is set to be decommissioned after 2030, with its orbit gradually lowered until it breaks up in the atmosphere over a remote part of the Pacific Ocean called Point Nemo, a spacecraft graveyard.**



- **Since its launch on November 20, 1998, the ISS has stood as a testament to the power of international cooperation and has space research.**
- **Orbital Marvel: The International Space Station (ISS), orbiting 430 kilometers above Earth, completes 16 orbits daily, witnessing 16 sunrises and sunsets.**
- **Speed: The ISS orbits Earth every 90 minutes at 8 kilometers per second.**
- **Size: Spanning 109 meters, it's almost as long as an American football field.**
- **Living Quarters: The ISS includes 6 sleeping areas, two bathrooms, a gym, and a panoramic view bay window.**
- **Countries like Japan, China, and India are aiming for independent space capabilities.**



- **Point Nemo is known as the Oceanic Pole of Inaccessibility.**
- **Location: South Pacific Ocean.**
- **It is the most remote location on Earth, situated approximately 2,688 kilometres from the nearest landmass.**
- **Due to its isolation, it is often considered the farthest point from any human habitation.**
- **The closest human presence to Point Nemo is the International Space Station, which orbits above the region.**
- **Decommissioned Spacecraft Cemetery: Point Nemo is a designated area where space agencies intentionally guide decommissioned spacecraft, including satellites and space stations, to re-enter Earth's atmosphere and fall into the ocean to avoid harm to populated areas.**

Mains Question

“Outer space is increasingly becoming an arena of strategic competition alongside cooperation.”

In this context, examine how space collaboration is shaping contemporary geopolitics. Discuss the opportunities and challenges for India in leveraging space diplomacy to advance its strategic interests.

(250 Words / 15 Marks)

“बाह्य अंतरिक्ष सहयोग के साथ-साथ रणनीतिक प्रतिस्पर्धा का भी प्रमुख क्षेत्र बनता जा रहा है।”

इस संदर्भ में विश्लेषण कीजिए कि अंतरिक्ष सहयोग समकालीन भू-राजनीति को किस प्रकार प्रभावित कर रहा है। भारत के लिए अंतरिक्ष कटनीति के माध्यम से अपने रणनीतिक हितों को आगे बढ़ाने के अवसरों और चुनौतियों पर चर्चा कीजिए।

(250 शब्द / 15 अंक)

Export Preparedness Index



- **The Export Preparedness Index (EPI) is a composite index that evaluates the export readiness, competitiveness, and institutional capacity of India's States and Union Territories at the sub-national level.**
- **Published by: NITI Aayog (Government of India)**
- **History:**
 - **First edition: August 2020**
 - **EPI 2024: 4th edition of the Index**

Criteria Used: EPI 2024 is based on:

- **4 Pillars**
- **13 Sub-pillars**
- **70 indicators**

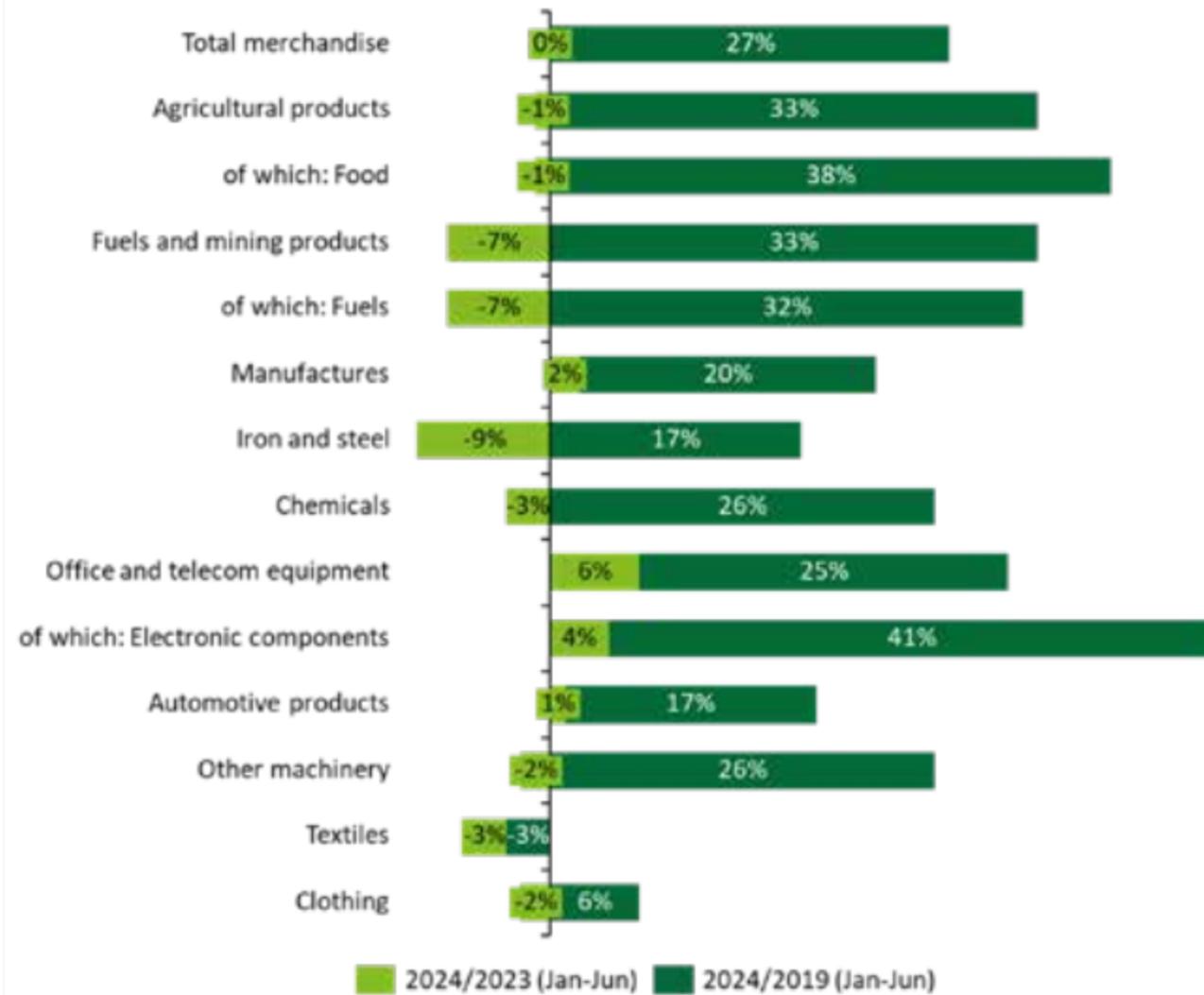


Figure 13: Year-on-Year change in merchandise trade growth by product category

Pillars:

<u>Pillar</u>	<u>Focus</u>
Export Infrastructure (20%)	Utilities, logistics, connectivity, industrial infrastructure
Business Ecosystem (40%)	Macroeconomy, cost competitiveness, human capital, finance, MSMEs , innovation
Policy & Governance (20%)	State export policies, institutions, regulatory environment
Export Performance (20%)	Export outcomes, diversification, market access, facilitation

Top Performing States & UTs (EPI 2024):

Large States:

- **Maharashtra**
- **Tamil Nadu**
- **Gujarat**
- **Uttar Pradesh**
- **Andhra Pradesh**

Small States / North-East / UTs

- **Uttarakhand**
- **Jammu & Kashmir**
- **Nagaland**
- **Dadra & Nagar Haveli and Daman & Diu**
- **Goa**

Shaksgam Valley



- **China has reasserted its claim over the Shaksgam Valley and defended its infrastructure activities there as legitimate.**
- **India has strongly rejected these claims, reiterating that Shaksgam Valley is Indian territory and that the 1963 China Pakistan agreement ceding the area is illegal and invalid.**
- **High altitude valley north of the Karakoram range, bordering China's Xinjiang region**
- **Political status: Part of Pakistan occupied Kashmir, specifically the Hunza Gilgit region**
- **Strategic proximity: Close to Siachen Glacier and Aksai Chin**
- **Area involved: About 5,180 sq km illegally ceded by Pakistan to China in 1963**

- **1963 Sino Pakistan Border Agreement: Pakistan illegally transferred Shaksgam Valley to China. India never recognised this agreement**
- **Article 6 of the agreement: Clearly states the boundary settlement is temporary and subject to renegotiation after the final resolution of the Kashmir dispute**
- **India's position: Pakistan had no sovereign right to cede Indian territory**
- **Hence the agreement is null and void**
- **CPEC passes through Indian territory under illegal occupation**

Economic corridor



Siachen Glacier is situated to the:

(a) East of Aksai Chin

(b) East of Leh

(c) North of Gilgit

(d) North of Nubra Valley

Global Risk Report

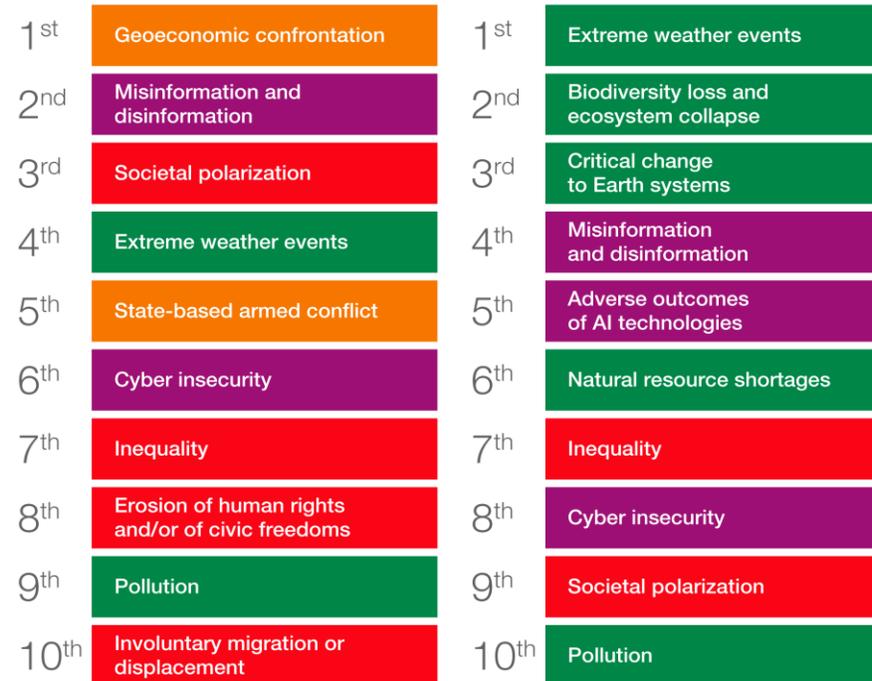
Global risks ranked by severity



Please estimate the likely impact (severity) of the following risks over a 2-year and 10-year period.

Short term (2 years)

Long term (10 years)



Risk categories ● Environmental ● Geopolitical ● Societal ● Technological

Source: World Economic Forum Global Risks Perception Survey 2025-2026.

- Released by the **World Economic Forum (WEF)**, the report identifies geoeconomic confrontation as the most significant global risk.
- In the current and immediate term (2026) and the short-to-medium term (up to 2028), the report highlights major risks such as geoeconomic confrontation, state-based armed conflicts, extreme weather events, rising societal polarisation, etc.
- In the long term (up to 2036), the most significant risks identified include extreme weather events, biodiversity loss and ecosystem collapse, etc.
- Major Risk faced by India: Cyber insecurity, Inequality (wealth, income), Insufficient public services and social protections (incl. education, infrastructure, pensions), etc.

What is Geoeconomic Confrontation?

- **Refers to strategic use of economic instruments by global or regional powers to reshape cross-border economic relations by restricting trade, technology, services, capital, or knowledge flows aimed at promoting self-reliance, constraining geopolitical rivals, and consolidating spheres of influence.**
- **Tools include sanctions, trade controls, investment restrictions, subsidies, state aid and currency measures.**
- **Recent Examples: Tariff imposition by the US, Ban on the export of critical minerals by China, etc.**
- **Potential Consequences: Erosion of multilateralism, Disruptions to a systemically important supply chain, Concentration of strategic resources and technologies, Economic downturn, State-based armed conflict, etc.**

Thank You!

