NR38 / Resource Security and the Global South: Critical Minerals at the Crossroads of Competition and Cooperation

Topic : Research

Chair : Noel Therattil (Centre for Social and Economic Progress, India)

Second Chair : Anindita Sinh (Centre for Social and Economic Progress, New Delhi, India)

GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

Panel:

Anindita Sinh, Research Associate, CSEP Asinh@csep.org (Research track)

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Significance of the panel topic:

Critical minerals have become an ubiquitous component across nearly every sector of the global economy, from defense and medicine to manufacturing and the clean energy transition. Rising geopolitical tensions, exacerbated by the weaponisation of critical mineral supply chains by countries, have intensified the global scramble for resource and energy security. In this context, developing economies must navigate geopolitical equilibria, economic development, and climate change.

The push to decouple critical mineral supply chains from geopolitical vulnerabilities has brought renewed attention to the question of 'How?'. Innovative mining techniques, element substitution, stockpiling, and the establishment of multilateral and bilateral partnerships are increasingly being explored as pathways to achieve this resource security.

Yet, while contemporary research has mapped these dependencies and outlined potential responses, we are presented with two primary issues. Firstly, contemporary research has been overwhelmingly created by and for the Global North, and secondly, the research gap on how to translate this knowledge into actionable policy frameworks remains unaddressed.

For developing economies such as India, this challenge is even more acute. Addressing the geo-economics of critical minerals requires confronting a bouquet of policy challenges. Circumstances, therefore, necessitate the following:

· The ideation of new concepts and methodologies for analysing critical mineral supply chains in India and across the Global South,

· A continuing discourse on the law and policies that address the uncertainty that pervades the nascent critical minerals sector and,

· An understanding of comparative and complementary critical mineral policies across the globe, and particularly in the Global South.

The objective of the panel is to highlight frontier research and promote 'blue-sky' thinking in the field of critical minerals that directly informs policy design and implementation across government, industry, and multilateral institutions. The panel seeks to foreground emerging critical mineral policy issues across evolving global challenges while drawing learnings tailored to the needs of India and the Global South. To this end, the panel welcomes new concepts and methodologies relevant to public policy research in India. Research questions within the scope of this panel include, but are not limited to, the following:

1. What geopolitical strategies can developing countries, including India, adopt to secure reliable critical mineral supplies while navigating an era of increasingly geopolitical tensions?

2. Given the increasing importance of resource and energy security in developing countries, would stockpiling policies bolster supply chain resilience and mitigate vulnerability arising from global decoupling in these states?

3. To what extent can innovative mining techniques and material science innovations allow for more resilient critical mineral supply chains in developing economies?

4. How does the geopolitics of critical minerals affect the clean energy transition in developing economies, either by adding even greater impetus or delaying viable energy transition endeavours in already constrained environments?

References:

1. Stockholm International Peace Research Institute (SIPRI). Critical Minerals and Great Power Competition: An Overview. 2024.

2. Sinh, Anindita & Xavier, Constantino. Partnerships for Self-Reliance: Internationalising India's Critical Minerals Sector (CSEP Working Paper 107). New Delhi: Centre for Social and Economic Progress, 2025

3. International Energy Agency (IEA). Global Critical Minerals Outlook 2025. Paris: IEA, 2025.

4. World Economic Forum (WEF). Translating Critical Raw Material Trade into Development Benefits. 2024.

5. Asia Pacific Foundation of Canada; in partnership with Centre for Social and Economic Progress (CSEP). Exploring Pathways for Indo–Canada Critical Mineral Diplomacy. 2025.

6. Critical Minerals in an Age of Geopolitical Rivalry: Stockpiling, Refining Constraints, and the Limits of Friend?Shoring — Saadaoui, Jamel; Smyth, Russell; Vespignani, Joaquin; Wang, Yitian. 2025.

Goldman Sachs. "Resource realism: The geopolitics of critical mineral supply chains." Goldman Sachs Global Institute, 13 September 2023.

CALL FOR PAPERS

Call for papers:

We invite scholars to submit conceptual or empirical papers that engage with research questions focusing on the overarching theme of 'Resource Security and the Global South: Critical Minerals at the Crossroads of Competition and Cooperation' and including those posed above. We are especially interested in manuscripts that challenge conventional policy wisdom or identify overlooked trade-offs in current decoupling strategies; synthesise concepts, theories, or policy frameworks from disparate fields (e.g., supply chain management, geopolitics, climate economics). Examine policy coordination challenges across government agencies, ministries, or nations. These studies should provide evidence-based recommendations grounded in understudied empirical contexts of developing economies or comparative studies of Global South vs. Global North economies (e.g., emerging mining economies, regional partnerships, sectoral supply chains).