**Event Summary** 

Wednesday, October 23, 2024

- CSEP hosted an Expert Research Consultation on 'India's International Strategy for Critical Minerals' with Constantino Xavier, Senior Fellow, CSEP and Anindita Sinh, Research Analyst, CSEP.
- The discussion was focused on understanding the approach and institutional design of India's international strategy for critical minerals.
- The roundtable discussion included participants from various Indian government institutions, diplomatic missions and embassies, multilateral organisations, private sector and industry, academic institutions and think tanks from India and abroad.
- Expert Research Consultations feature scholars presenting a working draft of evidence-based research to peers and
  practitioners. This closed-door, strictly off-record event seeks to enhance ongoing research by consulting key stakeholders in a round table format.

The discussion began with the speakers highlighting the research question of what an international strategy for critical minerals would look like for India and if there was a need for one given the increasing focus on energy transition. Underlining the policy context and relevance of critical minerals, such as (a) the growing dependence on China in the past ten years, (b) Indian focus having been mostly on domestic policy as opposed to its foreign policy, and (c) nascent development of international partnerships, the speakers aimed to understand the role and utility of international partnerships in the critical minerals sector. Along with this, they discussed how their research aims to identify the role the Indian government needs to play (facilitator, coordinator, etc.) when it comes to ensuring reliable supply chains for critical minerals. The speakers posed three set of questions to the participants to help direct the discussion on India's international strategy for critical minerals. First, what should be the Indian government's institutional design and strategy? Second, what is the role of international partnerships and which partnerships should India focus its resources on? And third, how can balancing external expectations and demands with its domestic ambitions?

## Definitions and Strategic Importance of Critical Minerals

The participants stressed the need for a critical examination of how these minerals are defined and prioritised. As the 'criticality of minerals' is not static, governments have employed different methodologies for classification. There was a question on whether the study adopted the Government of India's definition or was broader in scope. Copper, as a key example, was highlighted due to its extensive use in the energy sector and technology. As another participant noted, the heightened demand of critical minerals is driven by climate imperatives, thus noting how they should be positioned as collaborative resources rather than competitive ones. The UN Secretary-General's Panel on Transition Minerals was mentioned for its seven principles, which align international goals and offer a framework for India to explore partnerships.

A participant raised concerns about practical outcomes, observing that while various policies exist, tangible implementation of these policies remains limited. A suggestion was made to narrow India's focus to a few core minerals from the critical

list to ensure more targeted and actionable policy execution. Further, participants discussed the need for India to define the forms of minerals required, such as cobalt in raw or embedded states, which would directly influence strategic choices.

## **Sectoral and Institutional** Recommendations

Effective institutional design emerged as a recurring theme. A participant highlighted India's successful institutional setup in the Green Hydrogen Mission, with coordinated roles across ministries, suggesting a similar model for critical minerals, led by the Ministry of Mines. The importance of segmenting minerals by their end-use sectors was another key recommendation. Categorising minerals into clusters based on their applications (such as renewable energy or electronics), enabling ministries to tailor policies to sectoral needs, was also proposed. Additionally, there was consensus on the need to incorporate state-level agencies, given that states differ in their economic and resource strategies. This decentralised approach could facilitate peer-to-peer learning and collaboration, potentially strengthening India's critical minerals ecosystem.

Furthermore, participants stressed the importance of integrating research and development in critical minerals strategies. Emphasising the need for advanced geospatial and artificial intelligence tools to support exploration and processing, as well as investments in technology collaborations for innovative mining practices.

## **International Partnerships and** Collaboration Frameworks

Bilateral, minilateral, and multilateral partnerships offer varied avenues for collaboration, especially on mid-stream processing, which could be India's comparative advantage. Participants underscored the importance of partnerships and frameworks at various levels, with a shift in focus from mere acquisition to joint processing and technology-sharing. A participant noted India's active collaborations with the United Kingdom in recycling and innovative technology. The G20's high-level principles on circularity and efficient technology mentioned in the Delhi Declaration were highlighted as a guideline for India's engagements. The Quad and Indo-Pacific Economic Framework (IPEF) were discussed as valuable platforms for diversifying partnerships, especially in technology transfer and capacity-building. Participants noted that India's ability to collaborate with resource-rich member countries of the Association of South-East Asian Nations (ASEAN) while aligning with Quad partners could enhance its access to critical resources.

There was also discussion on replicating successful international partnerships, such as Canada-Korea and United States-Japan models, which focus on end-use and manufacturing collaborations rather than solely mineral acquisition. These partnerships address critical minerals' supply chains by simplifying processes for foreign investors. Participants underscored the need to improve India's investment climate for foreign companies and leverage platforms such as the European Union (EU)-India Trade and Technology Council (TTC) for further cooperation.

## **Challenges and Future Directions**

India faces several barriers in building a robust critical minerals ecosystem. The discussion highlighted how India lacks junior explorers that could carry out primary exploration before involving larger firms, a gap that hinders early-stage discovery and investment. Some participants suggested that India's reliance on international partnerships often indicates challenges in domestic policy execution, suggesting a need for local reform and development of junior exploration capacities.

A participant shared insights into why Indian states are often reluctant to report critical minerals due to limited profit incentives. Thus, noting the pressing need to establish better fiscal policies. For instance, the central government's recent takeover of mineral auctions from states underscores the urgency of creating a stable market. Financial instruments and economic frameworks, as suggested by participants, could incentivise investors and reduce risks, potentially accelerating India's progress in the critical minerals sector.

Going forward, the Ministry of Mines will lead the Critical Minerals Mission and therefore all initiatives associated to the sector, aiming to bridge gaps in domestic mining and foster public-private collaboration. With additional incentives planned and upcoming policies expected by March 2025, India's critical minerals strategy appears poised for considerable advancement. International partnerships will continue to play a crucial role in India's critical minerals strategy, with learnings from partner countries and higher possibilities of collaboration on the mid-stream and down-stream supply chains of critical minerals. Participants acknowledged that while challenges persist, India's success in developing a comprehensive framework for critical minerals will likely hinge on collaboration, policy reform, and long-term investments across government levels.

All content reflects the individual views of the participants. The Centre for Social and Economic Progress (CSEP) does not hold an institutional view on any subject.

> This summary was prepared by Anindita Sinh, Research Analyst, CSEP. For queries, please contact **Anindita Sinh** at asinh@csep.org.

> > Centre for Social and Economic Progress (CSEP)

6, Second Floor, Dr. Jose P. Rizal Marg, Chanakyapuri, New Delhi, India









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