

MP-IDSA *Commentary*

G20 Johannesburg Endorses Critical Minerals Framework

Ajey Lele

November 24, 2025

Summary

The US's absence from the 2025 G20 discussions on critical minerals weakens collective efforts to counterbalance China's influence.

The 2025 G20 Summit was held in Johannesburg on 22–23 November 2025. The United States (US) abstained from participating in the summit due to its diplomatic rift with the host, South Africa. President Xi Jinping also did not attend the summit, and Premier Li Qiang represented China. Russian President Vladimir Putin also did not participate in the summit. However, this did not dampen the spirit of the deliberations, and at the end of the summit, G20 members adopted the declaration by consensus. The declaration includes issues such as climate change, the green energy transition and debt relief for developing nations.

An essential aspect of this declaration involves the establishment of the G20 Critical Minerals Framework. This framework aims at leveraging critical minerals as a catalyst for sustainable development, inclusive economic growth and resilience. The declaration notes:

We recognise that, as the world economy undergoes significant changes, including sustainable transitions, rapid digitisation, and industrial innovation, the demand for critical minerals will increase. We note that the benefits associated with essential minerals have not been fully realised, and producer countries, especially in the developing world, are confronted with challenges of underinvestment, limited value addition and beneficiation, a lack of technologies, as well as socio-economic and environmental issues.¹

The G20 Critical Minerals Framework is a voluntary, non-binding blueprint for global cooperation on critical minerals. It is argued that there is a requirement for sustainable, transparent, stable and resilient critical mineral value chains. The purpose is to ensure that essential mineral resources become drivers of prosperity and sustainable development.

The framework seeks to ensure that mineral-producing countries, particularly in the Global South, derive maximum benefit from their resources by moving beyond raw material exports and into higher-value segments of the supply chain. It recognises that global economic transformations are sharply increasing the demand for critical minerals. Thus far, many producer countries, especially developing nations, continue to face structural challenges such as underinvestment, limited technological capacity, minimal value addition, and socio-economic and environmental constraints that prevent them from fully capitalising on their mineral endowments.²

¹ “[G20 South Africa Summit: Leaders’ Declaration](#)”, G20 South Africa 2025.

² “[G20 Backs Critical Minerals Plan to Boost Inclusive Growth, Resilience](#)”, *Business Standard*, 23 November 2025.

G20 countries are keen to expand the exploration of critical minerals, particularly in developing regions. For decades, most mineral-rich states have gained little in terms of business (except China). Many of these states have limited processing capacity, lack control over trade routes and markets, and face persistent geopolitical pressures that add to the problem. In particular, mineral-rich African states face a range of security challenges. The G20 forum aims to reverse this pattern by enhancing value retention and strengthening mineral extraction and processing within mineral-rich countries from the Global South. The idea is to help them capture a greater share of the benefits from global critical mineral value chains.

Implementing these ideas will not be easy. The voluntary nature of the framework may limit some states' commitment. Local industry interests may not always align with international supply chain demands, leading to a skewed demand-and-supply matrix. In the rare-earth mining business for years, limited sharing of technologies for mineral extraction and processing has posed a significant obstacle. This needs to change, and technology possessors need to adopt a proactive, development-oriented approach and, at least for some period, think beyond profit-driven considerations. Also, persistent geopolitical competition and shifting dynamics of cooperation will continue to influence the domestic policies of mineral-rich countries.

Prime Minister Narendra Modi, while speaking at the 2025 G20 Johannesburg, said that

Sustainability and clean energy are essential for global growth. Critical minerals are crucial for this and should be seen as a shared resource for humanity. That's why India proposes the G20 Critical Minerals Circularity Initiative, which can drive innovations such as recycling, urban mining, and second-life batteries.³

India's G20 Critical Minerals Circularity Initiative promotes recycling, urban mining and second-life battery innovations. It reduces reliance on primary extraction and boosts global standards and collaborative research & development for clean energy transitions. The idea of the G20 'Critical Minerals Circularity Initiative' has its roots in the National Critical Mineral Mission (NCMM), announced by the Government of India in 2025.⁴ This mission spans seven years from FY 2024–25 to FY 2030–31 and aims to secure the supply of critical minerals while

³ [“English Translation of Prime Minister's Statement at the G20 Summit: Session 2”](#), Press Information Bureau, Prime Minister's Office, 22 November 2025; MyGovIndia, [“Driving The Sustainable Mineral Solutions!...”](#), X (formerly Twitter), 23 November 2025.

⁴ [“National Critical Mineral Mission \(NCMM\)—FY 2024-25 to FY 2030-31”](#), Ministry of Mines, Government of India, January 2025.

strengthening India’s critical mineral value chains. The government has allocated Rs 16,300 crores for the mission and anticipates an additional investment of around Rs 18,000 crores. The initiative encompasses the entire value chain from mineral exploration and mining to processing and the production of final products.

To boost mineral recycling, NCMM has made a budget provision of Rs 1,500 crores over six years. The idea is to have an incentive scheme to develop 270 kt of recycling capacity annually. Companies would be rewarded for effective management of e-waste, Lithium-Ion Battery scrap and other scrap, such as catalytic converters from end-of-life vehicles. There would be financial incentives for businesses interested in the advanced recycling process, either by setting up new recycling units or by expanding or modernising existing facilities.

The focus would be to encourage industries to invest in the technology and infrastructure needed to extract minerals, such as lithium, cobalt, nickel and Rare Earth Elements (REEs), from waste. Subsequently, this material would be reused.⁵ India’s approach to investing in circularity has many benefits. It will lower dependence on primary mining and decrease import dependence. Also, there would be less pressure on supply chains and, more importantly, help reduce e-waste, benefitting the environment.

Interestingly, the issue of critical minerals, infrequent earths, has been discussed intermittently within the G20 framework since 2010.⁶ During the 2010 meeting, host South Korea had highlighted the strategic importance of diversifying supply and reducing dependence on dominant producers. Despite over a decade and a half of this dialogue, these discussions have had limited tangible impact on global policies and actions on the ground. This could mainly be due to the lack of binding commitments, technological challenges associated with extraction and processing, and geopolitical and economic challenges arising from vested business interests.

It is essential to realise that China’s long-standing dominance in this field cannot be overturned abruptly. In this connection, Trump 2.0 is trying to diversify supply chains and reduce dependence on China. However, this is not going to be an easy task. The US’s absence from the 2025 G20 discussions on critical minerals, though, weakens collective efforts to counterbalance China’s influence. There is a need for much more concentrated efforts to ensure essential minerals will not get ‘weaponised’.

⁵ “[National Critical Mineral Mission](#)”, International Energy Agency (IEA), 12 September 2025.

⁶ Michael Montgomery, “[Rare Earth Policy and the G20 Summit](#)”, *Investing News Network*, 8 November 2010.

About the Author



Group Captain (Dr.) Ajey Lele (Retd.) is Deputy Director General at the Manohar Parrikar Institute for Defence Studies and Analyses, New Delhi.

Manohar Parrikar Institute for Defence Studies and Analyses is a non-partisan, autonomous body dedicated to objective research and policy relevant studies on all aspects of defence and security. Its mission is to promote national and international security through the generation and dissemination of knowledge on defence and security-related issues.

Disclaimer: Views expressed in Manohar Parrikar IDSA's publications and on its website are those of the authors and do not necessarily reflect the views of the Manohar Parrikar IDSA or the Government of India.

© Manohar Parrikar Institute for Defence Studies and Analyses (MP-IDSA) 2025