

The global race for critical minerals is intensifying, but it is unfolding very differently from past resource contests. Oil once defined geopolitical power; today, it is copper, lithium, nickel, and graphite—materials essential for electric vehicles, renewable energy systems, and digital infrastructure. For India, whose economic growth and energy transition ambitions are accelerating simultaneously, securing these minerals is a strategic necessity.

Yet, in this new era, access is no longer determined by capital alone. It is shaped by trust, credibility, and the ability to align with the development priorities of mineral-rich countries. Across Africa—home to over 30% of global reserves of critical minerals—governments are increasingly demanding partnerships that go beyond extraction. They want technology transfer, local value addition, workforce development, and environmental accountability.

In this shifting landscape, India's emerging approach offers a notable contrast. Rather than positioning itself purely as a buyer or investor, it is gradually building a reputation as a collaborator—one that works within local priorities and seeks long-term alignment. This difference may prove decisive.

Take Zambia, a country synonymous with copper and central to the global energy transition. Copper demand is expected to surge in the coming decades, with projections indicating a significant global supply gap by 2035. India's own requirements are rising rapidly, driven by its renewable energy expansion and infrastructure development.

But Zambia's mining ecosystem faces a fundamental constraint: incomplete and outdated geological data. Much of the existing resource mapping is fragmented, often based on legacy surveys that do not reflect current realities. This creates uncertainty for investors and limits the government's ability to negotiate from a position of strength.

India's engagement in Zambia has focused on addressing this very gap. By supporting geological mapping and early-stage exploration—covering thousands of square

kilometres—Indian institutions are helping improve the country's understanding of its own resources. This may seem like a technical exercise, but its implications are far-reaching. Better data strengthens policymaking, enhances transparency, and ultimately allows Zambia to capture greater value from its mineral wealth.

This kind of upstream collaboration reflects a quieter but more durable form of partnership. It is not about immediate extraction, but about building the foundations for future cooperation. In a sector where information asymmetry has historically disadvantaged resource-rich countries, such contributions carry significant weight.

A different set of dynamics is evident in Zimbabwe, which holds some of the world's largest hard rock lithium reserves. Lithium, a key component in battery technologies, is witnessing explosive demand, with global consumption expected to multiply several times over by 2030. For India, which is entirely dependent on imports for lithium, diversifying supply sources is critical.

Zimbabwe, however, is not an easy environment for new entrants. The sector is marked by regulatory shifts, environmental concerns, and strong competition from established players. The government has also introduced policies that restrict the export of raw lithium, emphasising local processing and value addition.

In this context, India's potential strength lies not in competing on scale alone, but in how it operates. As global scrutiny of mining practices increases, environmental and social considerations are becoming central to investment decisions. In Zimbabwe, where mining has sometimes been associated with ecological damage and community displacement, responsible practices are not just desirable—they are essential.

Indian firms have an opportunity to differentiate themselves by embedding sustainability into their operations from the outset. This includes transparent environmental assessments,

efficient resource use, community engagement, and fair compensation mechanisms. Such practices not only reduce operational risks but also build local legitimacy.

Importantly, this approach aligns with Zimbabwe's own aspirations to move up the value chain and strengthen governance in the sector. By working within these priorities—rather than around them—India can position itself as a partner that supports national development goals while securing its own strategic interests.

If Zambia highlights the importance of knowledge and Zimbabwe underscores sustainability, Tanzania illustrates another dimension of partnership: capacity building.

Tanzania possesses significant reserves of graphite and nickel, both critical to battery technologies. Demand for these materials is expected to rise sharply as the global transition to clean energy accelerates. Yet the country faces a familiar challenge—limited capacity to process and refine these minerals domestically.

The constraint is not just infrastructure; it is human capital. Without a skilled workforce, the ability to move beyond raw material exports remains limited. Recognising this, Tanzania has prioritised education and training as part of its industrial strategy.

India's long-standing engagement in this area provides a natural foundation for deeper cooperation. Over decades, Indian training programmes, scholarships, and technical partnerships have supported the development of thousands of Tanzanian professionals. Institutions such as the IIT Madras campus in Zanzibar represent a new phase of this engagement, offering advanced education and research opportunities within the region.

By expanding such initiatives—particularly in fields related to mining, metallurgy, and energy—India can help build the expertise needed to support a more integrated mineral value chain. This is not just beneficial for Tanzania; it also strengthens the resilience of

India's own supply chains by fostering stable, capable partners.

What stands out across these examples is a consistent pattern. India's engagement tends to focus on enabling capabilities—whether through data, skills, or institutional collaboration—rather than solely extracting resources. This does not mean the approach is without challenges. Infrastructure deficits, regulatory complexities, and geopolitical competition remain significant obstacles across many African mining regions.

Moreover, India itself is still adapting to operating in these environments. Its institutions are expanding their international footprint, and its private sector must navigate high capital requirements and long project timelines. Mining projects often take decades to mature, requiring sustained commitment and policy continuity.

Yet these very constraints also highlight the importance of a differentiated approach. Competing purely on financial muscle against larger players may not always be feasible. Competing on trust, adaptability, and alignment with local priorities offers a more sustainable pathway.

There are also structural advantages that India brings to the table. Its experience as a developing economy that has navigated resource constraints and industrial growth resonates with many African countries. Its emphasis on capacity building, technology sharing, and institutional partnerships reflects a model of cooperation that is less extractive and more collaborative.

This is not to suggest that India's approach is perfect or universally superior. Outcomes will depend on execution, consistency, and the ability to adapt to local contexts. But there is a discernible effort to engage in ways that are responsive to the evolving expectations of partner countries.

In a global environment where supply chains are increasingly securitised and resource nationalism is on the rise, such an approach carries strategic value. Countries are no longer passive suppliers; they are active participants shaping the terms of engagement. Those who can build relationships based on mutual benefit are likely to enjoy more durable access.

The transition to clean energy is creating unprecedented demand for critical minerals, but it is also reshaping the rules of the game. Success will depend not just on securing resources, but on how those resources are sourced.

India's evolving engagement in Africa suggests an understanding of this shift. By focusing on partnership over extraction, sustainability over short-term gains, and capacity building over dependency, it is positioning itself as a credible and constructive actor in the global minerals landscape.

In the long run, this may prove to be its most valuable resource advantage.