



Pakistan's Rare-Earth Diplomacy: Strategic Hedging and Resource Statecraft Amid U.S.–China Competition

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ABSTRACT

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The intensification of U.S.–China strategic competition has transformed critical-mineral supply chains into an increasingly important arena of geoeconomic competition. Rare-earth elements (REEs), particularly those used in advanced technologies, renewable-energy systems and defence applications, have acquired strategic significance because of the concentration of extraction, processing and downstream manufacturing. This environment creates opportunities for states with prospective mineral resources to attract investment, technology and diplomatic engagement, although resource potential does not automatically translate into strategic power. This article examines Pakistan's emerging rare-earth diplomacy through an integrated framework of Strategic Hedging and Resource Statecraft. Drawing on qualitative documentary analysis and twelve semi-structured elite interviews with policymakers, policy experts and senior journalists, it argues that Pakistan is attempting to use critical-mineral diplomacy to diversify external partnerships and preserve strategic flexibility without committing exclusively to either the United States or China. The article conceptualises this process as prospective resource statecraft: the strategic mobilisation of anticipated or emerging mineral potential to generate diplomatic and economic opportunities before a state develops dominant extraction, processing or downstream capabilities. The analysis shows that Pakistan's approach represents asymmetric strategic hedging rather than balancing or geopolitical realignment. China remains Pakistan's deeply embedded strategic and economic partner, while U.S. engagement in the critical-mineral sector is more selective and emerging. Pakistan can therefore add new economic and technological options without abandoning existing partnerships. However, limited processing capacity, institutional fragmentation, regulatory uncertainty, dependence on foreign capital and technology, and weak value-chain integration constrain the conversion of mineral potential into durable strategic leverage. The article argues that this produces conditional strategic autonomy: greater policy options without freedom from structural dependence. Pakistan's mineral diplomacy can therefore create strategic opportunities, but its ultimate value will depend on the country's ability to convert geological potential into institutional, technological and industrial capability.

Introduction

The contemporary international system is increasingly shaped by competition over technology, trade, investment, infrastructure and strategically important supply chains. Economic instruments have consequently become central to geopolitical statecraft

(Blackwill & Harris, 2016). Critical minerals occupy a particularly important position because they connect economic security, technological competition, energy transition and defence capability.

Rare-earth elements are especially significant within this environment. Although rare earths comprise seventeen elements with diverse applications, several, including neodymium, praseodymium, dysprosium and terbium, are essential to high-performance permanent magnets used in electric vehicles, wind turbines and advanced technologies. Their strategic importance derives not simply from geological availability but from concentration across the global value chain. In 2024, China accounted for approximately 60% of mined magnet rare-earth production and 91% of refined output, while its position in permanent-magnet manufacturing was even more dominant (IEA, 2025).

This concentration has encouraged the United States and other major economies to diversify critical-mineral supply chains. Consequently, states possessing actual or prospective mineral resources have acquired greater geopolitical relevance. Yet geological potential alone does not constitute supply-chain power. Extraction, separation, refining, infrastructure, technological capability and downstream manufacturing determine whether resources can generate sustained economic and strategic value.

Pakistan provides an important case through which this relationship can be examined. Pakistan possesses considerable mineral potential but remains a relatively modest participant in global mineral production (USGS, 2025). At the same time, the country has increasingly sought foreign investment and institutional reforms in the mineral sector. The National Minerals Harmonization Framework and related initiatives reflect efforts to improve investment conditions and coordinate mineral development (Government of Pakistan, 2025).

The geopolitical importance of these developments has increased alongside U.S.-China competition. Pakistan maintains a long-standing and deeply institutionalised relationship with China while simultaneously seeking greater economic engagement with the United States. Emerging critical-mineral cooperation therefore creates a sector in which Pakistan can potentially diversify external partnerships without undertaking comprehensive geopolitical realignment.

Recent developments illustrate this emerging process. In 2025, Pakistan announced cooperation with U.S. Strategic Metals concerning critical minerals, including rare earths, alongside discussions concerning mineral exports and potential processing capacity in Pakistan (Government of Pakistan, 2025). Such developments indicate increasing international interest in Pakistan's mineral potential, but they do not establish Pakistan as a major rare-earth producer or supply-chain power.

This article therefore asks:

How does Pakistan employ prospective rare-earth and critical-mineral potential as an instrument of strategic hedging and resource statecraft amid U.S.-China competition?

The article makes three arguments. First, Pakistan's mineral diplomacy represents a form of asymmetric strategic hedging, through which Islamabad seeks to expand external options while retaining its established relationship with China. Second, Pakistan's use of prospective mineral potential can be conceptualised as prospective resource statecraft, whereby anticipated resources generate diplomatic and economic opportunities before substantial production capability exists. Third, this process produces conditional strategic autonomy, because diversification can expand policy choices without eliminating structural dependence.

The article contributes to the literature by extending strategic hedging into the geoeconomic domain, conceptualising prospective resource statecraft, and demonstrating the importance of domestic resource-conversion capacity in determining whether mineral potential becomes strategic leverage.

Strategic Hedging and Resource Statecraft

Strategic Hedging

Strategic hedging explains how states manage uncertainty by simultaneously maintaining relationships with competing major powers rather than committing exclusively to one. Unlike balancing or bandwagoning, hedging allows states to diversify relationships, preserve policy flexibility and reduce exposure to uncertain future developments (Kuik, 2008, 2016; Ciorciari & Haacke, 2019).

Three dimensions are particularly relevant to Pakistan:

1. Partnership diversification – developing relationships with multiple external actors;

2. Issue compartmentalisation – cooperating with different powers in different sectors; and
3. Selective engagement – deepening cooperation where national interests overlap without creating comprehensive alignment.

Recent scholarship identifies Pakistan's broader foreign-policy behaviour as involving pragmatic hedging between China and the United States (Ali, Arshad, & Rogers, 2024; Jamali & Hussain, 2026). This article extends that literature by examining how mineral diplomacy can function as one mechanism through which such hedging is operationalised.

Resource Statecraft

Resource statecraft concerns the strategic use of natural resources and resource-related economic capabilities to pursue broader political objectives. In geoeconomic competition, resources can become instruments of bargaining, investment attraction and strategic positioning (Blackwill & Harris, 2016).

However, resource-based influence depends on a state's position within the relevant value chain. States controlling extraction, processing or technologically important downstream stages possess greater potential leverage than states that merely possess geological deposits.

Pakistan occupies the latter, prospective position. Its opportunity therefore lies less in controlling existing supply chains than in using mineral potential to attract investment, technology and international partnerships.

This article accordingly introduces the concept of prospective resource statecraft.

Prospective resource statecraft refers to the strategic mobilisation of anticipated or emerging resource potential to generate diplomatic, economic and geopolitical opportunities before a state acquires dominant production or processing capabilities.

Table 1. Established and Prospective Resource Statecraft

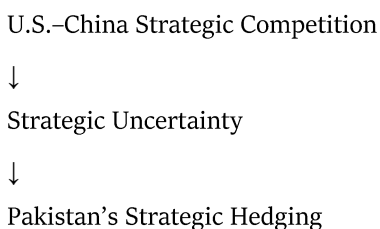
Dimension	Established resource statecraft	Prospective resource statecraft
Resource status	Commercially established	Anticipated/emerging
Production	Significant	Limited/developing
Leverage	Actual supply/control	Expected future access
Main instruments	Supply, exports, contracts	Investment, signalling, partnerships
Value-chain position	Established	Aspirational
Strategic outcome	Material leverage	Conditional leverage

Prospective resource statecraft is therefore inherently conditional. International interest may emerge before production, but durable influence requires successful resource development.

Integrated Analytical Framework

The article conceptualises Strategic Hedging as the behavioural logic and Resource Statecraft as the operational mechanism.

Figure 1. Integrated Analytical Framework



1.Partnership diversification

2.Issue compartmentalisation

3.Selective engagement

↓

Prospective Resource Statecraft

1.Investment attraction

2.Technology partnerships

3.Supply-chain positioning

4.Diplomatic signalling

↓

Resource Conversion Capacity

1.Institutions

2.Regulation

3.Extraction

4.Processing

Industrial integration

↓

Conditional Strategic Autonomy

The framework contains an important distinction. International competition creates the incentive for hedging; mineral potential creates the opportunity for resource statecraft; and domestic capacity determines whether that opportunity can be converted into strategic leverage.

Methodology

This study employs a qualitative case-study design combining documentary analysis with twelve semi-structured elite interviews.

The documentary corpus consists of Pakistani government policy documents, official statements, mineral-sector material, investment and facilitation documents, bilateral statements, international institutional reports and relevant academic literature. Documentary analysis was used to trace Pakistan's mineral-policy evolution and external engagement.

Primary evidence was obtained through twelve semi-structured interviews conducted with information-rich respondents selected through purposive sampling.

Table 2. Interview Sample

Category	Number
Policymakers	4

Policy experts/analysts	4
Senior journalists	4
Total	12

The interviews were analysed using a hybrid deductive-inductive thematic approach. Deductive codes were derived from the theoretical framework, including diversification, selective engagement, resource statecraft and strategic autonomy. Inductive coding identified additional themes concerning institutional fragmentation, technological dependence, regulatory uncertainty and value-chain constraints.

Table 3. Analytical Coding Framework

Concept	Indicators
Strategic hedging	Multiple partnerships; avoidance of exclusive alignment
Resource statecraft	Investment, technology and diplomatic engagement
Prospective resource statecraft	Use of anticipated mineral potential
Resource conversion	Extraction, processing and industrial integration
Conditional autonomy	Expanded options despite continued dependence

Pakistan's Mineral Potential and Policy Orientation

Pakistan's mineral sector illustrates the distinction between resource potential and resource capability. Although Pakistan possesses significant geological potential, its actual position in global mineral production remains limited (USGS, 2025).

Recent geological research has investigated rare-earth occurrences in Pakistan, including geochemical evidence generated through geological surveys. Such evidence demonstrates legitimate exploration potential but should not automatically be interpreted as proof of commercially viable reserves (Nawaz, I., & Lyu, R. 2026).

Pakistan has consequently placed increasing emphasis on investment facilitation, geological information and regulatory coordination. Government initiatives concerning mineral-sector harmonisation indicate an attempt to create a more predictable environment for domestic and international investors (Government of Pakistan, 2025).

The strategic challenge is therefore one of conversion:

Potential resources must be transformed into verified resources, productive capacity and ultimately value-chain capability.

This distinction is central to Pakistan's mineral diplomacy.

Rare Earths and U.S.–China Geoeconomic Competition

Rare-earth supply chains demonstrate why mineral diplomacy has acquired strategic significance. The major vulnerability is not simply mining but concentration in processing and downstream manufacturing. The IEA reports that China dominated global refining and permanent-magnet manufacturing in 2024 (IEA, 2025).

Table 4. Selected Strategic Characteristics of the Rare-Earth Value Chain

Stage	Strategic significance
Exploration	Establishes resource knowledge
Mining	Provides raw material

Separation	Technologically intensive
Refining	Major source of supply-chain concentration
Magnet manufacturing	Critical downstream capability
Advanced manufacturing	Highest-value applications

For Pakistan, this structure creates both an opportunity and a limitation.

The opportunity is that major powers seeking supply diversification may develop relationships with new resource-holding states.

The limitation is that mining alone does not provide equivalent strategic leverage.

Pakistan therefore needs to move beyond the question of resource ownership toward value-chain positioning.

Pakistan's Strategic Hedging through Mineral Diplomacy

Partnership Diversification

The evidence indicates that Pakistan seeks greater diversification of external investment and technological relationships.

China remains Pakistan's most deeply embedded major-power partner. Consequently, diversification should not be interpreted as an attempt to replace China.

Rather, Pakistan seeks to add options without abandoning an existing strategic relationship.

This is consistent with the logic of hedging.

Economic diversification becomes strategically relevant when it reduces excessive dependence and preserves alternative policy choices.

Issue Compartmentalisation

Pakistan can cooperate with different external actors in different sectors without treating each relationship as a comprehensive geopolitical alignment.

Critical minerals offer an especially suitable arena for such compartmentalisation because cooperation can be framed in terms of investment, technology and supply-chain diversification.

U.S. cooperation in minerals therefore does not necessarily imply strategic balancing against China.

Likewise, continued cooperation with China does not preclude sector-specific engagement with Western actors.

Selective Engagement

Pakistan's relationships with China and the United States are structurally asymmetric.

Table 5. China and U.S. Engagement

Dimension	China	United States
Strategic relationship	Deep and multidimensional	More selective
Institutional depth	High	More limited in minerals
Mineral relevance	Investment, technology, processing potential	Supply-chain diversification and investment
Relationship function	Established partner	Emerging additional option
Hedging implication	Existing anchor	Diversification opportunity

Pakistan's mineral diplomacy should therefore be understood as asymmetric hedging rather than equivalent balancing between Washington and Beijing.

China and the Embedded Partnership

China's importance to Pakistan's mineral diplomacy derives from the broader depth of bilateral relations and China's established position in global rare-earth supply chains.

China's technological and industrial capabilities can potentially provide Pakistan with investment, expertise and processing capacity. Yet dependence on a dominant external partner can also constrain bargaining autonomy.

This produces a strategic dilemma:

The partner capable of contributing significantly to mineral-sector development may simultaneously become a source of excessive dependence.

Pakistan's objective therefore need not be to exclude Chinese involvement. A more realistic strategy is to prevent excessive concentration by developing complementary partnerships.

Diversification thus represents supplementation rather than substitution.

The United States and Emerging Mineral Engagement

U.S. engagement represents a different form of opportunity.

Washington has increasingly sought to diversify critical-mineral supply chains because of the concentration of processing and manufacturing capacity in China. This creates potential interest in resource-rich and resource-prospective countries.

Pakistan's 2025 critical-mineral cooperation with U.S. Strategic Metals represents an important development in this regard. Pakistani government statements identified cooperation concerning critical minerals and rare earths, including discussion of mineral exports and potential processing capacity (Government of Pakistan, 2025).

However, this engagement should be interpreted cautiously.

It does not establish a comprehensive strategic realignment.

Instead, it represents sector-specific cooperation generated by overlapping economic and supply-chain interests.

The sustainability of such cooperation will depend on commercial viability, geological certainty, regulatory predictability, infrastructure and Pakistan's ability to develop processing capacity.

Prospective Resource Statecraft

Pakistan's emerging mineral diplomacy illustrates prospective resource statecraft through three principal mechanisms.

Investment Attraction

Prospective resources can attract investors seeking access to future mineral supplies.

Diplomatic Signalling

Mineral potential can increase a state's relevance to countries seeking supply-chain diversification.

Technology Partnerships

Mineral diplomacy can provide access to capital and technological capabilities that Pakistan currently lacks.

The process can therefore be represented as:

Mineral potential → international interest → investment/technology → resource development → value-chain participation → potential strategic leverage

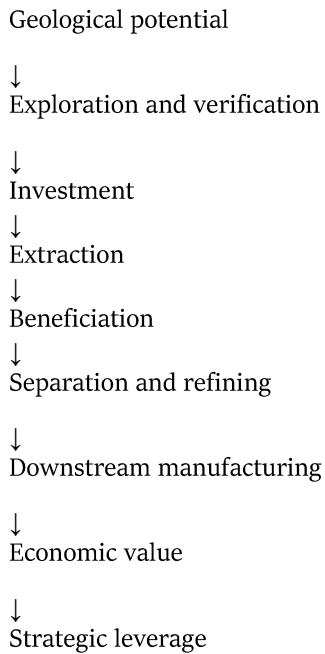
The key word is potential.

Pakistan does not currently possess the material capabilities required to exercise major supply-chain power. Its statecraft is therefore prospective and non-coercive.

The Resource-Conversion Problem

The central domestic challenge is the conversion of geological potential into productive and strategic capability.

Figure 2. Resource-Conversion Chain



The greatest challenge is likely to arise beyond extraction. The IEA demonstrates that processing and downstream manufacturing remain highly concentrated internationally (IEA, 2025).

Table 6. Principal Constraints

Constraint	Strategic consequence
Institutional fragmentation	Weak policy coordination
Regulatory uncertainty	Reduced investor confidence
Limited technology	Dependence on external expertise
Limited processing	Low domestic value addition
Infrastructure constraints	Higher development costs
Weak downstream industry	Limited strategic leverage

Thus, Pakistan's principal challenge is not simply whether minerals exist, but whether the state can create the institutional and technological conditions necessary to commercialise them.

Conditional Strategic Autonomy

The interaction of Strategic Hedging and Resource Statecraft produces neither complete autonomy nor passive dependence.

This article therefore conceptualises the outcome as conditional strategic autonomy.

Conditional strategic autonomy refers to an expansion of a state's strategic and diplomatic options without eliminating structural dependence on external actors, capital, technology or markets.

For Pakistan, mineral diplomacy can:

1. expand investment options;
2. create new diplomatic channels;
3. encourage technology partnerships;
4. reduce excessive dependence on a single external partner.

However, it cannot by itself remove:

1. China's deeply embedded strategic position
2. dependence on foreign capital and technology
3. selective U.S. engagement
4. domestic institutional constraints

Pakistan's mineral diplomacy therefore modifies the conditions of dependence rather than eliminating dependence itself.

Discussion

The analysis reveals a prospective leverage paradox.

Pakistan's prospective mineral resources have acquired greater diplomatic significance because major powers are seeking to diversify critical-mineral supply chains. Yet Pakistan's lack of established production and processing capacity simultaneously limits its bargaining power.

This creates the following relationship:

Greater international competition → greater interest in Pakistan's potential

but also:

Limited domestic capability → continued dependence on external actors

The strategic challenge is consequently to transform international interest into domestic capability.

The objective should not be limited to attracting foreign mining investment. Pakistan's mineral diplomacy should seek partnerships that contribute to:

Geological knowledge

1. technology transfer
2. processing and refining
3. skills development
4. infrastructure
5. downstream industrialisation

The strategic objective should therefore be:

resource → processing → industrial capability → value addition → strategic leverage

rather than:

resource → raw export → foreign processing → continued dependence.

Theoretical Contributions

This article makes three contributions.

First, strategic hedging beyond security

The study extends hedging scholarship into the geoeconomic domain by demonstrating how critical-mineral diplomacy can provide a mechanism for diversification and strategic flexibility.

Second, prospective resource statecraft

The article conceptualises a form of resource statecraft that operates before substantial production capability exists. Anticipated resources can generate diplomatic attention, investment and technological partnerships even before they produce significant material supply.

Third, conditional strategic autonomy

The study conceptualises autonomy as a continuum rather than a binary condition. States can expand policy options while remaining structurally dependent.

The broader theoretical proposition is:

International competition creates incentives for hedging; prospective resources create opportunities for resource statecraft; domestic conversion capacity determines whether those opportunities become strategic leverage; and the resulting expansion of policy space constitutes conditional strategic autonomy.

Conclusion

Pakistan's emerging rare-earth diplomacy illustrates the growing intersection between critical minerals and international strategic competition.

The article has argued that Pakistan's approach can be understood as strategic hedging operationalised through prospective resource statecraft. U.S.–China competition creates incentives for Pakistan to diversify external relationships, while mineral potential provides an additional platform for doing so.

Pakistan's approach is asymmetric rather than balanced. China's relationship with Pakistan is deeply embedded, whereas U.S. mineral engagement remains more selective and emerging. Consequently, mineral cooperation with Washington should not be interpreted as comprehensive geopolitical realignment, just as cooperation with China should not be understood as precluding diversification.

Pakistan's greatest challenge lies domestically. Geological potential must be converted into economically viable extraction, processing, industrial capability and eventually strategic leverage. Without this conversion, mineral diplomacy risks remaining primarily aspirational.

The article therefore concludes that Pakistan's mineral diplomacy generates conditional strategic autonomy. It can expand the country's diplomatic and economic options without eliminating structural dependence.

The broader lesson is that:

Mineral endowment creates the possibility of statecraft; institutional and technological capability determines whether that possibility becomes power.

Pakistan's strategic challenge is consequently not simply to discover and export minerals, but to build the institutional, technological and industrial capacity necessary to convert prospective mineral wealth into sustainable national advantage.

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