

Central European University and Bard College

**Bridging Trade Gaps: Leveraging USTDA's Toolkit to Unlock U.S. Investment in  
Tajikistan's Critical Minerals Industry**

Capstone Project by

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Dual MA in International Relations and Global Studies

Word Count: 5483

New York, USA

May 1, 2025

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## Executive Summary

The demand for critical minerals has shifted the primary focus of global competition. For the United States, lowering its dependence on Chinese-controlled supply chains is no longer just a strategic choice but a necessity (Rudenshiold 2025). While most attention focuses on prioritized regions, despite its considerable potential, Tajikistan's mining sector remains unnoticed. In the area where China and Russia have a strong presence, especially in hydropower and infrastructure, mining is still a mostly unused opportunity.

Beneath Tajikistan's mountainous terrain lies a wealth of resources, including gold, silver, antimony, and rare earth elements (REEs), essential for emerging and future technologies. The presence of antimony alone significantly elevates Tajikistan's strategic relevance. With the second-largest reserves in the world, it supports industries like semiconductor manufacturing and defense (Rahimov and Mamadjonov 2015). At the same time, rare earths such as cerium, neodymium, and lanthanum fit directly into America's renewable energy plans. Here, diversifying U.S. access to alternative sources becomes a national priority (Renaud 2019). However, there are significant barriers to U.S. firms investing in Tajikistan. Challenges such as complex licensing procedures, weak legal protections for foreign investors, and outdated infrastructure have created substantial barriers for companies seeking to enter the market. For American firms, these issues are further complicated by the strong economic presence of China and Russia in the region. This combination of internal and external obstacles has made it difficult for the U.S. to establish a stable role, leaving its involvement in Tajikistan's mining sector limited and inconsistent.

This paper argues that the U.S. Trade and Development Agency (USTDA) can be a strong tool to change this situation. Using Reverse Trade Missions (RTMs) and the Global Procurement Initiative, USTDA can do more than just make it easier to enter the market. It can change the whole

environment for investors. RTMs give a platform for talking about rules, training on how to buy goods, and creating direct links between U.S. businesses and Tajik officials, which is necessary for building trust.

The research adopts a qualitative content analysis of USTDA reports, U.S. trade agreements, and Tajikistan's investment regulations to assess existing barriers and policy gaps. Analyzing USTDA-funded projects in the Philippines and Southern Africa reveals best practices in leveraging feasibility studies and infrastructure support, particularly in the mining sector (USTDA 2022b). These insights will help develop an action plan for applying similar strategies in Tajikistan's mining industry. Additionally, stakeholder mapping adds to the study by finding Tajik government agencies and American companies with or possible interest in mining. This network creates a base for longer and stronger engagement, not just one-time investments.

This research aims to develop a targeted action plan for how USTDA can support U.S. private sector entry into Tajikistan's mining industry. By the end of the study, the findings will outline specific mechanisms and stakeholders through which USTDA can expand feasibility studies, optimize RTMs for direct business-government engagement, and integrate procurement training programs to improve investment conditions.

## Table of Contents

<b>Introduction.....</b>	<b>1</b>
<b>Literature &amp; Policy Review.....</b>	<b>3</b>
<b>U.S. Critical-Minerals Policy Landscape.....</b>	<b>3</b>
<b>USTDA Mandate and Toolkit.....</b>	<b>3</b>
<b>Gap Analysis: Central Asia.....</b>	<b>4</b>
<b>Case-Based Models for Strategic Replication .....</b>	<b>5</b>
<i>Philippines: Critical-Minerals Processing Feasibility.....</i>	<i>5</i>
<i>Southern Africa: Infrastructure and Connectivity for Mining.....</i>	<i>6</i>
<b>Methodology .....</b>	<b>9</b>
<b>Challenges to U.S. Engagement in Tajikistan’s Mining Sector .....</b>	<b>10</b>
<b>Opportunities and Entry Points for U.S. Investment .....</b>	<b>13</b>
<b>Underused Institutional Tools and Strategic Niches .....</b>	<b>13</b>
<b>Policy Signals, Legal Openings, and Return on Investment .....</b>	<b>14</b>
<b>Strategic Alignment and Win-Win Development Logic.....</b>	<b>15</b>
<b>Strategic Action Plan for USTDA .....</b>	<b>17</b>
<b>Objective and Theory of Change.....</b>	<b>17</b>
<b>Priority Interventions .....</b>	<b>17</b>
<i>Feasibility Studies and Technical Assistance: Building Processing Capacity.....</i>	<i>17</i>
<i>Reverse Trade Missions and Public-Private Dialogue: Building Trust and Capability .....</i>	<i>18</i>
<i>Procurement and Regulatory Reform Support .....</i>	<i>19</i>
<b>Stakeholder Mapping and Delivery Mechanisms .....</b>	<b>20</b>
<i>Key Stakeholders.....</i>	<i>20</i>

<i>Delivery Mechanisms</i> .....	21
<i>Follow-Up and Sustainability</i> .....	21
<b>Conclusion</b> .....	<b>23</b>
<b>Bibliography</b> .....	<b>25</b>

## Introduction

Critical minerals have become the foundation of international trade and strategic stability. Nowhere is this more visible than in the United States' escalating efforts to diversify supply chains away from China, whose dominance in REE production and processing shapes global markets (United States House Committee on Oversight and Accountability 2023). With growing demand from renewable energy, semiconductor production, and defense industries, securing alternative sources is no longer solely a matter of economic resilience. It has become a priority for national security.

Tajikistan, a landlocked country better known for its hydropower potential than its mining sector, may initially seem an unlikely candidate, but this perception is misleading. Beneath its rugged landscapes lie significant reserves of gold, silver, antimony, and REEs, indispensable to U.S. strategic industries (Meir Khanova 2025). The potential is evident. However, American companies have largely stayed away, discouraged by unclear regulations, deteriorating infrastructure, and the dominant economic presence of China and Russia. Beijing's Belt and Road Initiative and Moscow's legacy investments have tightened Tajikistan's economic dependencies, limiting U.S. access and room for maneuver (World Bank 2023).

Despite multiple U.S. initiatives to strengthen trade ties with Central Asia, the mining sector has consistently fallen outside the core focus. Instead, priority has been given to energy projects, infrastructure development, and efforts to enhance regional connectivity. As a result, the mining industry has remained largely underdeveloped. USTDA has long been able to bridge policy and private-sector gaps, particularly in emerging economies. Through targeted reverse trade missions (RTMs) and feasibility studies, USTDA has effectively catalyzed private sector involvement in the mining sector abroad. This model is proven but underutilized in Central Asia.



This research examines how similar USTDA-backed strategies could be applied to Tajikistan to overcome investment barriers and enhance U.S. involvement in its mining industry. Accordingly, this paper addresses the following research question: How can the USTDA enhance U.S. private sector engagement in Tajikistan's mining industry to strengthen bilateral trade relations?

By analyzing USTDA project archives, Tajikistan's investment regulations, and the specific barriers facing American firms, this study aims to build a practical roadmap. Structuring RTMs strategically, expanding feasibility studies, and embedding technical assistance programs offer a pathway to unlock Tajikistan's mining potential and end China's near-monopoly over the country's natural resources.

## **Literature & Policy Review**

### **U.S. Critical-Minerals Policy Landscape**

The global race for critical minerals has highlighted structural weaknesses as resources are indispensable to technologies across energy, defense, and infrastructure. As the Congressional Research Service notes, they are “an essential foundation for American economic prosperity and national security” (Rowan 2025, 1). However, U.S. policy has long lacked coordination and urgency in critical minerals policy (O’Sullivan and Bordoff 2023, 9). In order to address this miscoordination, the Energy Act of 2020 tasked the U.S. Geological Survey with identifying supply chain risks and producing a critical minerals list, now including over 50 entries, many of which are present in Tajikistan, including antimony (Burton 2022). As a result of that study, complete self-sufficiency is unlikely. As the Aspen Institute points out, the U.S. cannot meet global or domestic demand alone (2023, 4). China’s dominance in processing compounds this challenge, with over 60% of lithium and cobalt refined there (Rowan 2025, 5). This concentration exposes the U.S. to geopolitical and economic risks (O’Sullivan and Bordoff 2023, 8).

In response, diversification is key. Rather than isolationism, experts recommend partnerships grounded in ESG standards and life-cycle cost analysis (U.S. Department of Energy 2024, 48). These principles now underpin the U.S. approach, setting the stage for institutional mechanisms like USTDA to operationalize strategic engagement abroad.

### **USTDA Mandate and Toolkit**

A singular premise lies at the core of USTDA’s strategy and outcomes. As the only U.S. government agency created explicitly for overseas project preparation, USTDA draws on over three decades of experience to advance U.S. commercial and foreign policy goals (USTDA 2025a, 1). Its mandate is operationalized through feasibility studies, pilot projects, and technical assistance

interventions targeted at the earliest stages of infrastructure development, where design choices and financial pathways are critical (Runde, Bandura, and Kosta 2018, 3).

The agency's signature tools, such as Reverse Trade Missions and the Global Procurement Initiative, serve dual purposes: promoting U.S. exports and shaping governance standards abroad. RTMs bring foreign delegations to observe American infrastructure firsthand and establish enduring commercial ties between business and government representatives of both countries (USTDA 2025a, 15). These missions are often executed by private partners such as BCIU and Meridian International (HigherGov 2025).

GPI, meanwhile, trains procurement officials to evaluate public tenders through life-cycle cost and best-value frameworks (USTDA 2025a, 8). These tools create a replicable model that de-risks investment, boosts U.S. firm competitiveness, and supports supply chain resilience, including in sectors like critical minerals (USTDA 2023, 18).

### **Gap Analysis: Central Asia**

Central Asia holds significant mineral wealth, yet it continues to play a limited role in global supply chains. Tajikistan alone has an estimated 1.5 million tons of antimony, yet 78% of its output is sent to China for processing due to limited domestic capacity (Meir Khanova 2025). The region's geology is rich, but its data is Soviet, outdated, and often misaligned with modern strategic priorities (Poliakov 2024). So far, no major industrial mineral processing projects have been completed (Special Eurasia 2025). While the U.S. and EU have launched initiatives like the C5+1 Critical Minerals Dialogue and the Minerals Security Partnership to integrate Central Asia into global value chains, infrastructure, and institutional gaps persist (United States Department of State 2024). Despite its policy inconsistencies, Tajikistan's government is signaling a new openness to U.S. investment, offering incentives and encouraging downstream processing

(Poliakov 2024). This literature review thus reveals a clear opening: Tajikistan's mineral wealth, combined with strategic intent and growing U.S. policy interest, presents a timely, underutilized platform for USTDA-led engagement. The next step is practical, turning insight into action.

### **Case-Based Models for Strategic Replication**

#### *Philippines: Critical-Minerals Processing Feasibility*

The USTDA's work in the Philippines presents a transferable framework for supporting critical minerals processing initiatives in emerging markets. This framework is built on three key pillars: early-stage feasibility support, climate-aligned value addition, and coordinated interagency dialogue, which can be strategically adapted to Tajikistan's mining landscape.

First, the cornerstone of the USTDA model in the Philippines is early intervention through feasibility studies. The agency funded a comprehensive assessment for Eramen Minerals, Inc. to evaluate a Zambales Province nickel and cobalt processing facility (USTDA 2022a). This study aims to define technical specifications, assess economic viability, and integrate environmental, social, and governance (ESG) standards into project design (Manila 2023). USTDA ensures commercial viability and alignment with U.S. technological standards by focusing on this pre-construction phase. A similar feasibility-focused entry point would enable de-risking and informed investment for Tajikistan, which suffers from outdated Soviet-era geological data and underexplored mineral zones. A facility in the Philippines is designed for raw extraction and processing into battery-grade precursor materials, strengthening global supply chains while contributing to the clean energy transition (USTDA 2023, 18). A shift toward in-country value addition, modeled after the Eramen project, would align Tajikistan with global ESG standards and unlock higher economic returns.

USTDA embedded this project in broader economic diplomacy initiatives. The agency's participation in the Luzon Corridor Steering Committee and Indo-Pacific Business Forum signaled a high-level U.S. commitment and encouraged interagency coordination on infrastructure, energy, and logistics (USTDA 2024). This model of policy-backed commercial engagement is vital for Tajikistan, where weak institutional capacity often diminishes investor confidence. A similar approach, combining feasibility support with diplomatic anchoring, would move U.S. engagement beyond isolated deals.

Finally, the Philippines opted to integrate into the US-Japan Critical Minerals Agreement rather than negotiate a bilateral deal, signaling a preference for multilateral alignment (Table 2024). Tajikistan, already included in the C5+1 Critical Minerals Dialogue, could similarly benefit from regional coordination mechanisms to balance Chinese influence (United States Department of State 2024).

The Philippines model offers a structured path for Tajikistan: start with feasibility, prioritize ESG-compliant value chains, embed in policy architecture, and pursue regional coordination. This four-part framework is actionable, strategic, and rooted in tested practice.

#### *Southern Africa: Infrastructure and Connectivity for Mining*

In contrast to the Philippines, where USTDA's engagement centered on processing feasibility and climate-aligned battery materials, the Southern Africa model adds a distinct layer of strategic infrastructure and regional connectivity. This model integrates project preparation with enabling logistics, power, and digital infrastructure, elements especially relevant to Tajikistan's mountainous geography and landlocked trade constraints.

One of the most precise mechanisms employed in Southern Africa is integrating critical minerals development with transport infrastructure planning. USTDA's support for the Lobito

Corridor, through an environmental and social impact assessment for a 485-mile rail line linking Angola and Zambia, aims not only to extract minerals but to facilitate trade routes and logistics hubs (USTDA 2025b). This anticipatory de-bottlenecking is particularly relevant for Tajikistan, where limited internal transport infrastructure hinders export diversification. A similar approach, pairing mining investment with transport feasibility, would ensure that Tajik minerals can access global markets.

USTDA's engagement in South Africa also strongly emphasizes energy-sector partnerships. Through feasibility studies for battery storage systems and a reverse trade mission focused on green hydrogen technologies, the agency created cross-sectoral pathways to support sustainable energy transitions while reinforcing industrial capacity (USTDA 2024, 41). Tajikistan, with its underutilized hydropower and unreliable grid, can benefit from a similar energy-mining integration model, where clean energy feasibility studies back new processing investments.

Digital infrastructure development is another dimension. The USTDA-funded broadband feasibility study in South Africa's Western Cape was not directly related to mining, but it demonstrates the agency's broader toolkit in promoting favorable sectors (USTDA 2022b, 21). For Tajikistan, where digital gaps complicate investor coordination and data management, applying such support to geological surveying or remote mine operations could be transformative.

Tajikistan's applicable framework is a hybrid model combining the Philippines' feasibility-first approach with Southern Africa's infrastructure-integrated strategy. From the Philippines, early-stage feasibility studies with ESG benchmarks and alignment with climate goals demonstrate how to attract responsible investment (USTDA 2022a). From Southern Africa, pairing mining with supporting infrastructure like rail corridors, energy systems, and digital access, offers a replicable blueprint (USTDA 2024, 41). Tajikistan can adapt by consistently developing critical minerals

along with transport feasibility, integration of renewable energy, and digital modernization. This multi-sectoral preparation will de-risk investment, expand export potential, and strengthen U.S.-Tajik commercial partnerships.

## **Methodology**

This research proceeds in sequential stages, each building on prior analysis to develop a strategic roadmap for USTDA engagement in Tajikistan's mining sector. The first part involved a qualitative content analysis of U.S. government literature, USTDA reports, and global supply chain policy frameworks. This review established the strategic context and institutional tools relevant to U.S. critical minerals engagement abroad.

The second part synthesized two case studies, from the Philippines and Southern Africa, where USTDA has implemented feasibility-first and infrastructure-integrated models. These cases provided tested frameworks that were assessed for their adaptability to Tajikistan's regulatory and logistical conditions.

The next part will focus on investment policies and regulatory documents, particularly those related to Tajikistan's mining sector. This will help identify concrete challenges to U.S. private sector entry, such as licensing, transparency, infrastructure, and legal uncertainty.

From there, the research will shift toward opportunity mapping, applying models drawn from the case studies and literature to explore entry points for USTDA programs, such as RTMs, feasibility studies, and procurement training, that could address these barriers.

The final part will construct a Strategic Action Plan, integrating these findings into a tailored engagement model for USTDA. This will include stakeholder mapping to identify key actors within Tajikistan and the U.S. positioned to advance investment partnerships.



## Challenges to U.S. Engagement in Tajikistan's Mining Sector

Despite its mineral wealth and growing strategic relevance, Tajikistan presents a challenging U.S. private sector engagement operating environment. The core obstacles to American investment in Tajikistan's mining sector fall into three categories: weak trade linkages, demanding regulatory conditions, structural infrastructure, and geopolitical constraints.

The absence of a comprehensive U.S.-Tajik trade architecture severely limits strategic anchoring. Although Tajikistan is a signatory to the U.S.-Central Asia Trade and Investment Framework Agreement (TIFA), the agreement remains limited in scope, and no bilateral Free Trade Agreement or preferential USTR program is in place (Flesch 2024). Tajikistan has also not concluded an Association Agreement with the EU, further isolating it from Western-aligned trade systems. Meanwhile, Chinese economic diplomacy has filled the void. Beijing's Belt and Road Initiative (BRI) has replaced Russia as the dominant foreign investor, financing power plants, roads, and transit corridors (Lloyds Bank 2024). This imbalance leaves U.S. companies without the institutional support and preferential access that their Chinese counterparts utilize.

The opportunity cost is high. Tajikistan holds substantial untapped gold, antimony, and silver reserves, with its industrial output in 2022 derived from mining activities and nearly \$1.7 billion in mineral exports (International Trade Administration 2024). Foreign direct investment is already flowing disproportionately into the sector, with 85% of 2022's reported FDI going into extractives (Lloyds Bank 2024). Nevertheless, most of this investment comes from non-Western actors, including China, Russia, and Iran. Private U.S. companies remain on the sidelines, constrained by the lack of structured trade incentives and complicated import procedures (Nelson and Storz 2025).

Also, Tajikistan's opaque regulatory regime deters serious foreign investment. Although legal frameworks formally permit 100% foreign ownership and contain no explicit market access restrictions, in practice, foreign investors face a convoluted and inconsistently applied licensing system (Flesch 2024). Regulatory texts are difficult to access, legal procedures are overly centralized, and land-use rights remain unclear and politically sensitive. Foreign companies must lease state-owned land under poorly defined terms, terms that are easily exploited as collateral (World Bank 2024). Legal protection is similarly compromised. Tajikistan's judiciary is widely perceived as biased in favor of the executive, particularly in commercial disputes involving politically connected state-owned enterprises (SOEs) (Flesch 2024).

These SOEs represent another significant regulatory bias. Dominant in the extractive sector, they benefit from direct state aid and protection from competitive pressures (World Bank 2024). Many operate at a loss yet continue to receive sub-loans and exemptions unavailable to private firms. In sectors like mineral mining, this weakens market competition and blocks access for foreign entrants, while non-transparent tendering processes further disadvantage Western companies (World Bank 2024).

Finally, physical infrastructure gaps and geopolitical entanglements increase risk. Although Tajikistan's National Development Strategy 2030 (NDS) emphasizes the modernization of electricity and transport, progress has been uneven (Flesch 2024). The mountainous terrain, poorly integrated grid, and underdeveloped westward export routes present significant logistical challenges. The U.S. has begun exploring Central Asia's critical minerals potential. Still, current supply chain realities undermine feasibility, including unreliable rail, high transit costs, and the dominance of Chinese-built logistics infrastructure (Nelson and Storz 2025). The Middle Corridor,

often cited as an alternative route, remains underdeveloped and increasingly dominated by Chinese actors, further eroding its potential as a Western-aligned export path (Nelson and Storz 2025).

Even domestically, infrastructure shortcomings, such as outdated roads and unreliable electricity, create major bottlenecks. At the same time, proximity to unstable neighbors and lack of protection from land allocation lawsuits introduce legal and political instability (Flesch 2024).

In short, while Tajikistan offers significant geological potential, the landscape for U.S. investment is constrained by an underdeveloped trade framework, governance inefficiencies, and geopolitical infrastructure dominated by rival powers. Any future U.S. engagement must be carefully calibrated to account for these overlapping challenges, even as strategic opportunities begin to emerge.

## **Opportunities and Entry Points for U.S. Investment**

### **Underused Institutional Tools and Strategic Niches**

Contrary to the perception of Central Asia as a geopolitical blind spot, Tajikistan already offers entry points for sustainable and low-risk U.S. engagement. Institutional mechanisms like the C5+1 Critical Minerals Dialogue, the U.S.-Central Asia TIFA Council, and multilateral bank programs provide immediate platforms for coordination. These are not hypothetical. They are active structures that the United States can leverage today. While traditional capital investment in high-risk authoritarian contexts may be problematic, instruments like reverse trade missions, technical feasibility studies, and advisory support through USTDA offer soft, politically secure channels to begin engagement.

This soft infrastructure enables commercial diplomacy without the exposure associated with large-scale financial commitments. In a system where direct equity ownership may be met with resistance or arbitrary oversight, technical cooperation through procurement, training, and advisory missions allows U.S. firms to build credibility and relationships. The institutional terrain is not only underutilized but well-suited to the incremental U.S. commercial presence model. According to the U.S. State Department (2024), "U.S. companies bidding on public tenders may receive interagency advocacy support, including direct engagement from the U.S. Embassy in Dushanbe", strengthening the visibility and security of early-stage American actors.

At the same time, Tajikistan's mining sector offers a clear strategic niche: mineral processing. While 78% of Tajikistan's antimony, silver, and rare earths are currently exported raw, mainly to China, this exposes the country to value loss and the U.S. to supply risk (Poliakov 2024). The Atlantic Council (2025) emphasizes that "the primary bottleneck in the critical minerals supply chain is processing, not mining," and that Central Asia "lacks processing capacity for

energy minerals like lithium, uranium, nickel, and cobalt" Tajikistan, in particular, holds the world's second-largest antimony reserves but has insufficient in-country processing (Renaud 2019). This void presents a rare opportunity for the U.S. to establish secure supply chains outside China.

If the U.S. helps Tajikistan build local value-added processing capacity, other than simply extracting minerals, it creates a win-win logic. Tajikistan benefits from industrial development and job creation, while the U.S. gains a trusted supply partner for a mineral critical to semiconductors and defense. This approach also minimizes long-term geopolitical risk. Direct investment in Tajikistan's domestic production and processing helps bypass Chinese transit routes, strengthening U.S. control over supply chains and reducing strategic dependency.

### **Policy Signals, Legal Openings, and Return on Investment**

Tajikistan's investment climate may present bureaucratic obstacles, but recent reforms indicate a clear policy trajectory toward liberalization. The country's new tax code in 2022 offers favorable conditions for manufacturing and value-added industries, including two-year tax exemptions extendable based on investment size (Flesch 2024). The government has also adopted WTO-compliant regulations and offers "official incentive packages for investing companies, including land-use rights, reduced tariffs for set periods, and financial incentives for localization and employment of resident laborers" (Flesch 2024). While enforcement remains uneven, the legal text signals formal openness.

Importantly, foreign ownership is unrestricted in most sectors. As confirmed by multiple sources, "there are no limits on foreign ownership or control of firms and no sector-specific restrictions that discriminate against market access" (Lloyds Bank 2024). Moreover, foreign firms may acquire mineral usage rights and assets essential for supply chain integration. These policies

suggest that the legal framework supports long-term, scalable investment for companies willing to navigate the procedural environment.

These regulatory shifts are backed by real sectoral momentum. Mining contributed 20.7% of Tajikistan's industrial output in 2022, with over 13,500 workers and 307 active companies (International Trade Administration 2024). In the same year, exports of mineral products reached \$894 million, alongside \$529.5 million in precious metals and \$319.3 million in base metals, despite limited domestic refinement (International Trade Administration 2024). This underscores that return on investment is not speculative; it is already occurring, and the market is growing.

The country's goal to attract USD 55 billion in FDI by 2030, mentioned in its National Development Strategy, further reflects this commitment. The government "accelerated efforts in 2022–2023 to attract foreign companies to its mineral extraction and refinement sector", and the NDS explicitly prioritizes a shift from agriculture to industrial, digital, and sustainable development (International Trade Administration 2024; Flesch 2024). The policy intent is there. Labor, electricity, and raw resource acquisition costs remain well below global averages. Corporate tax rates for producers are as low as 13%, and exports of refined metals are zero-rated for VAT (Lloyds Bank 2024). In short, Tajikistan offers an uncommon mix of low operating costs and high-value output.

### **Strategic Alignment and Win-Win Development Logic**

Finally, Tajikistan presents a market and a strategic partnership opportunity. Unlike China, which dominates Tajikistan's mining and transit sectors through extraction-focused deals, U.S. engagement can prioritize value creation. This is not wishful thinking, but an effective differentiating factor. The Atlantic Council (2025) notes that China already "holds the majority of mining permits in Kyrgyzstan and Tajikistan," and "most raw metals end up in China or Russia

for further enrichment." American investment focused on local value chains would enhance Tajikistan's industrial base and reduce Beijing's chokehold over critical mineral flows.

From a national security standpoint, the U.S. can gain a dependable source of antimony and rare earths from a partner actively seeking to diversify. Despite an authoritarian context, the State Department (2024) has affirmed that "the government publicly acknowledges the role of the private sector in driving innovation and industrialization". This creates space for mission-aligned commercial diplomacy, primarily through initiatives like reverse trade missions, digital procurement systems, and public-private dialogue.

Such cooperation advances U.S. objectives: reducing supply chain dependence, supporting transparent governance, and ensuring new partners benefit economically from their resource wealth. Unlike Chinese BRI ventures, which often extract value without building local capacity, a U.S. strategy based on industrial partnership fosters mutual benefit.

## Strategic Action Plan for USTDA

### Objective and Theory of Change

This action plan aims to increase sustainable U.S. private sector engagement in Tajikistan's mineral sector by enabling a rules-based, investment-ready environment that enhances trust, transparency, and profitability for American firms. USTDA should serve not merely as a financier of preliminary studies but as a strategic enabler that facilitates regulatory, infrastructural, and informational bottlenecks that have historically disincentivized U.S. involvement. Particular focus should be placed on downstream mineral processing, procurement system reform, and digital infrastructure, three pillars that can reposition Tajikistan as a resource supplier and a regional hub for ESG-aligned mineral development.

The theory of change underpinning this strategy posits that if USTDA operationalizes targeted feasibility studies, reverse trade missions, and Global Procurement Initiative tools, then (i) institutional opacity will be reduced through technical and regulatory capacity building; (ii) bilateral trust between U.S. firms and Tajik entities will deepen through high-level public-private exchange; and (iii) tangible demonstration projects will create precedent for commercially viable, ESG-compliant mineral value chains (“USTDA IQC Events Manual” 2023). This, in turn, will open space for U.S. market actors in areas traditionally dominated by Chinese and Russian entities. The cumulative impact will be institutionalizing a bilateral mineral development corridor grounded in transparency, resilience, and shared strategic interest.

### Priority Interventions

#### *Feasibility Studies and Technical Assistance: Building Processing Capacity*

USTDA should initiate a dedicated feasibility study for antimony and REE processing in Tajikistan, with potential site selection near known deposits in the Sughd and Khatlon regions.



Approximately 78% of Tajik antimony and REEs are exported in raw form, primarily to China, with no domestic beneficiation infrastructure in place (Poliakov 2024). This deprives Tajikistan of value-added economic gains and leaves the U.S. without reliable access to critical materials essential for semiconductors, clean energy technologies, and defense production.

In order to address this, USTDA can adapt the model applied in the Philippines, where the Agency funded a technical and ESG-compliant feasibility study for the nickel-cobalt plant at Eramen Minerals, thereby leveraging regional expertise, Indo-Pacific Business Forum engagement, and multilateral financing. The Tajikistan case should similarly include (i) ESG benchmarks in alignment with USAID-UPPAF guidelines, (ii) cooperation with the Ministry of Industry and the Tajik GeoData Center to update Soviet-era geological data, and (iii) co-financing outreach to international financial institutions such as the EBRD and IFC.

A successful feasibility study would include project-level environmental impact modeling, market off-take assessments, and policy-readiness diagnostics. The study would position U.S. equipment suppliers, processing service providers, and advisory firms to participate in a pilot-scale refinery project with long-term scaling potential. Integrating the U.S. Geological Survey as a technical partner via the C5+1 platform would further align the effort with broader U.S. regional engagement.

#### *Reverse Trade Missions and Public-Private Dialogue: Building Trust and Capability*

Institutional trust is a critical precursor to commercial action in high-risk markets. USTDA should fund two RTMs over a three-year period to bring Tajik officials and industry representatives to the U.S. for exposure to best practices in mineral processing, digital procurement, ESG compliance, and life-cycle project management. These missions serve a dual

function: personalizing institutional relationships and normalizing international standards within the Tajik government and private sector structures.

The RTMs should be designed and delivered in collaboration with BCIU and Meridian International, replicating models used successfully in South Africa and Southeast Asia. In addition to in-person site visits, the program should include post-mission virtual modules covering life-cycle cost evaluation, digital procurement readiness, and ESG screening tools drawn from GPI curricula.

Crucially, the RTMs should feed into a standing bilateral workshop series facilitated by the Tajik Ministry of Industry and TajikStandard, focusing on technical regulation harmonization. These workshops will address specific industry case studies, such as procurement of processing plant components or geologic exploration technologies, for practical relevance.

Institutional anchoring of these exchanges should occur via the State Committee on Investments in Tajikistan, which can serve as the point of continuity for engaging alumni of the RTM programs. The Committee's "single-window" registration mechanism should be integrated into the missions to demonstrate real-world navigation of Tajikistan's administrative system for foreign firms. Follow-up deliverables should include a bilateral "Joint Work Agenda" aligned with C5+1 mineral dialogue priorities and TIFA objectives.

#### *Procurement and Regulatory Reform Support*

USTDA must address procedural opacity and corruption risks in Tajikistan's public procurement systems to complement technical and trust-building measures. The legal framework in Tajikistan allows for foreign participation, but it is undermined by discretionary application and individual contracting practices.

A GPI-led training cycle should target mid- to senior-level procurement officials across the Ministry of Finance, the Ministry of Industry, and the State Committee on Investment. The training should include modules on best-value evaluation, life-cycle costing, digital tendering, and fraud detection. Drawing on the GPI experience in South Africa's energy and extractives sector, this initiative should culminate in forming a "best-practice cohort" of 30+ Tajik procurement professionals committed to transparent, competitive contracting.

Additionally, USTDA should support the integration of these reforms into Tajikistan's digital procurement platforms, namely, Investcom.tj and procurement.gov.tj, by providing both technical assistance and peer-to-peer exchange. The ultimate objective should be the development of a digital pilot tender in the mining or infrastructure sector that explicitly incorporates GPI practices and is open to foreign bidders under standardized criteria.

Furthermore, a practical vehicle would be establishing an "Investment Readiness Clinic" co-hosted by USTDA, USAID, and the State Committee to institutionalize these reforms. This would be a triage point for incoming American firms, providing diagnostic support on legal compliance, tax incentives, and procurement eligibility. Such clinics can also facilitate regulatory audits and recommend procedural reforms for upcoming public tenders.

## **Stakeholder Mapping and Delivery Mechanisms**

### *Key Stakeholders*

- USTDA HQ will provide technical oversight and funding.
- U.S. Embassy Dushanbe will coordinate on-the-ground logistics, RTM planning, and private-sector outreach.
- BCIU and Meridian International will implement RTMs and conduct post-visit follow-ups, leveraging their institutional networks.

- Tajik Ministry of Industry, Tajik GeoData Center, and the State Committee on Investment will serve as local institutional partners and technical gatekeepers.
- IFIs such as EBRD, IFC, and UNIDO will be engaged as potential co-financiers and facilitators of policy reform alignment.

### *Delivery Mechanisms*

1. Feasibility Studies will be delivered through open USTDA tendering processes, with a preference for firms experienced in ESG-aligned mineral project design.
2. RTMs will be conducted under structured partnership agreements with USTDA implementers and co-designed with Tajik government agencies.
3. Regulatory and procurement reform efforts will be operationalized via memoranda of understanding with the Ministry of Industry and the State Committee, anchored within the C5+1 or TIFA regional framework.

### *Follow-Up and Sustainability*

The action plan will be guided by a three-year results framework, including:

- Three feasibility studies on antimony, REEs, and logistics infrastructure
- Two RTMs with a combined reach of 40+ Tajik stakeholders
- One GPI pilot embedded within the mining or infrastructure procurement sector

Annual policy briefs co-authored by USTDA and the State Committee on Investment will ensure transparency and course correction. All RTM and GPI alumni will be invited to join working groups linked to a formalized U.S.-Tajik Mineral Investment Dialogue under the C5+1 umbrella.

Finally, integrating the Ministry of Finance and the National Bank into the digital procurement and payments reform pilots will help anchor reforms in Tajikistan's fiscal framework, laying the groundwork for scalable and replicable investment readiness beyond the mineral sector.

## Conclusion

This Capstone project offers a targeted strategy for unlocking U.S. private sector engagement in Tajikistan's mining industry through USTDA-led tools and partnerships. Drawing from a comprehensive analysis of institutional challenges, investment opportunities, and replicable models in the Philippines and Southern Africa, the project proposes concrete interventions tailored to Tajikistan's investment climate and strategic potential.

The research concludes that USTDA should initiate a pilot feasibility study focused on antimony and rare earth processing in Tajikistan's northern mining corridor, where deposits remain underutilized and dominated by non-U.S. actors. This study should be paired with a Reverse Trade Mission to bring Tajik procurement officials and SOE executives to the U.S., fostering trust-based relationships and showcasing American processing and digital infrastructure capabilities.

Also, the project recommends the deployment of USTDA's Global Procurement Initiative to provide targeted capacity-building for Tajik public buyers, focusing on life-cycle costing in mining infrastructure procurement and integration with U.S. firms. This approach will enhance Tajikistan's procurement transparency and position U.S. suppliers competitively.

Furthermore, USTDA should partner with BCIU and Meridian International to facilitate regular public-private roundtables, enabling U.S. companies to signal interest and shape early-stage project pipelines. These roundtables should also serve as platforms for clarifying legal uncertainties and amplifying success stories of U.S.-Tajik cooperation.

Finally, this project identifies a broader policy implication: strategic gains can be achieved without heavy capital investment in frontier markets like Tajikistan. Instead, early-stage U.S. government-backed engagement, via studies, training, and matchmaking, can de-risk markets, crowd in private capital, and build trusted commercial corridors. Tajikistan presents an unclaimed

niche in critical mineral development where U.S. entry is feasible and strategically advantageous, if approached with precision, pragmatism, and institutional tools already at hand.

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