



"UZBEKISTAN-2030": A DUAL PURSUIT OF ECONOMIC DIPLOMACY AND REGIONAL INTEGRATION FOR SUSTAINABLE DEVELOPMENT IN CENTRAL ASIA

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Article History:
Received: 21 July 2025
Revised: 12 September 2025
Accepted: 15 September 2025



ABSTRACT. *"Uzbekistan-2030" Strategy represents a pivotal national development blueprint aimed at transforming the nation into a competitive and sustainably developed state. This article examines the dual pursuit of economic diplomacy and regional integration as foundational pillars of this strategy. Through a comprehensive analysis of the strategy's core objectives, key performance indicators, and recent implementation efforts, this paper elucidates how Uzbekistan leverages proactive international engagement and intensified intra-regional cooperation to foster sustainable economic growth, enhance social welfare, and ensure environmental protection. The article details the country's initiatives in attracting foreign direct investment, expanding trade partnerships, and spearheading critical infrastructure projects in transport, energy, and water management across Central Asia. By analyzing empirical data and assessments from international organizations, this study highlights the progress, challenges, and future prospects of Uzbekistan's strategic trajectory, emphasizing its commitment to becoming a linchpin of stability and prosperity in the broader Central Asian region.*

KEYWORDS: *Central Asia, economic diplomacy, foreign direct investment, green economy, infrastructure, regional integration, sustainable development, trade.*

INTRODUCTION

Uzbekistan, a landlocked nation at the heart of Central Asia, has embarked on an ambitious journey of profound transformation under its "Uzbekistan-2030" Strategy. This comprehensive national development program, formally adopted following the Presidential Decree "On the Uzbekistan-2030 Strategy" (Presidential Decree No. PF-158, 2023), serves as a strategic roadmap for the country's transition towards a more prosperous, equitable, and sustainable future.

At its core, the "Uzbekistan-2030" Strategy embodies a dual pursuit: the vigorous advancement of economic diplomacy and the deepening of regional integration. These twin engines are seen as indispensable for unlocking Uzbekistan's full potential, enhancing its global competitiveness, and ensuring sustainable development across all facets of society and the economy (Ministry of Investment, Industry and Trade, 2023).

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JOURNAL OF
CENTRAL ASIAN
STUDIES
<https://jcas-journal.com>

For decades, Central Asia faced challenges related to fragmented economic spaces, limited connectivity, and uncoordinated resource management. However, a new era of regional cooperation has emerged, with Uzbekistan playing a pivotal role in fostering a more interconnected and interdependent Central Asia. This article argues that Uzbekistan's proactive engagement in economic diplomacy—aimed at attracting foreign investment, diversifying trade, and forging strategic partnerships—is inextricably linked with its commitment to regional integration. By strengthening ties with neighboring countries and beyond, Uzbekistan seeks to create a synergistic environment where economic growth is shared, security is bolstered, and collective sustainable development goals are realized.

This paper will delve into the intricacies of the "Uzbekistan-2030" Strategy, exploring its five key pillars and the ambitious targets set for the coming decade. It will then critically examine the instruments and outcomes of Uzbekistan's economic diplomacy, showcasing its efforts to position itself as an attractive destination for foreign capital and a reliable global trade partner. Subsequently, the article will analyze the country's multifaceted approach to regional integration, highlighting significant advancements in transport connectivity, energy collaboration, and crucial water resource management initiatives. Leveraging recent and precise data, as well as assessments from reputable international organizations, this analysis aims to provide a nuanced understanding of Uzbekistan's progress, the challenges it faces, and the promising outlook for sustainable development in Central Asia driven by this dual strategic imperative.

LITERATURE REVIEW

National development strategies, such as Uzbekistan-2030, are widely conceptualized as blueprints for long-term socio-economic transformation (Stiglitz, 1998). These strategies articulate a nation's vision, set strategic priorities, and establish measurable targets for progress. Increasingly, they are framed in line with the United Nations Sustainable Development Goals (SDGs), reflecting a global trend toward integrating economic growth with social equity and environmental protection (United Nations, 2015). Uzbekistan's current approach is emblematic of this shift: it aims to reach high-income status while simultaneously addressing poverty reduction, improving public services, and mitigating the effects of climate change (UNSDG, 2025). Development economics scholarship underscores that achieving such goals requires more than ambitious planning. Institutional reforms, human capital investment, and private sector engagement are frequently cited as critical enablers of successful long-term transformation (Acemoglu & Robinson, 2012).

Within this broader framework, economic diplomacy has emerged as a particularly relevant dimension of national development strategies. Defined as the use of diplomatic tools to advance economic interests, it encompasses trade promotion, foreign direct investment (FDI) attraction, economic agreement negotiations, and engagement in international financial institutions (Saner & Yiu, 2005; Lee & Hocking, 2011). The literature emphasizes economic diplomacy's role in expanding market access, enabling technology transfer, and strengthening a country's position in global economic networks (Bayne & Woolcock, 2017). For developing economies such as Uzbekistan, these functions are especially important in diversifying exports, reducing reliance on a

narrow set of commodities, and deepening integration into global value chains (World Bank, 2024). Scholars also note that sustained success in these areas depends on a stable regulatory environment and transparent governance, both of which are essential for attracting and retaining foreign investment (IMF, 2024).

Regional integration theory provides another lens for understanding Uzbekistan's development trajectory. The theory posits that closer economic, political, and social ties among neighboring states can deliver mutual benefits, ranging from expanded trade and improved infrastructure to enhanced security and collective responses to shared challenges (Mattli, 1999; Hurrell, 2007). While earlier scholarship on Central Asia often highlighted barriers to integration—including geopolitical rivalries, water disputes, and diverging economic priorities (Linn, 2004; Zabel, 2017)—more recent work points to a renewed impetus for cooperation. Under Uzbekistan's regional leadership, new opportunities for transport corridors, energy grids, and coordinated water management have come to the fore (ADB, 2024). A key theme in this literature is "connectivity," particularly infrastructure-driven connectivity, which can reduce trade costs and strengthen regional competitiveness (World Bank, 2023).

The relationship between economic diplomacy and regional integration is increasingly recognized as mutually reinforcing. A country's capacity to attract investment and expand trade is often strengthened by participation in regional blocs and by commitments to improve cross-border connectivity (Frankel, 1997). For Central Asia, this synergy carries particular weight given the region's landlocked geography and shared development challenges. Uzbekistan's transition from a historically insular policy stance to one of open engagement and proactive regional leadership represents a notable turning point (International Crisis Group, 2020). Earlier studies focused largely on the internal challenges of Uzbekistan's economic reforms, but more recent scholarship has begun to examine their external dimensions, highlighting how national development strategies intersect with regional dynamics (Pomfret, 2023). Building on this emerging body of work, the present article seeks to provide an updated, empirical analysis of Uzbekistan's dual pursuit of domestic transformation and regional integration within the framework of the Uzbekistan-2030 Strategy.

METHODOLOGY

This study employs a mixed-methods approach, combining qualitative content analysis of official documents and academic literature with quantitative data synthesis from government and international reports. It uses comparative and case study analyses to critically assess Uzbekistan's "Uzbekistan-2030" Strategy, focusing on economic diplomacy and regional integration for sustainable development.

"UZBEKISTAN-2030" STRATEGY: A TRANSFORMATIVE BLUEPRINT

The "Uzbekistan-2030" Strategy is not merely a collection of targets but a holistic vision for national resurgence, building upon the foundational reforms initiated since 2017. It envisions Uzbekistan achieving upper-middle-income status and becoming a fully democratic, rule-of-law based state by the end of the decade. The strategy is structured around five key pillars, each with distinct strategic goals and measurable

Key Performance Indicators (KPIs) designed to guide implementation and track progress (Presidential Decree No. PF-158, 2023; MIIT, 2023).

Pillar 1: Creating Decent Conditions for Realizing the Potential of Every Person

This pillar focuses on human capital development and social welfare, recognizing that a skilled, healthy, and empowered populace is the bedrock of sustainable development.

Goals: Enhancing the quality of education, improving healthcare services, strengthening social protection, fostering youth development, and promoting culture and sports.

KPIs:

Education: Increase higher education enrollment from 39% in 2023 to 50% by 2030. Expand opportunities for quality preschool, general secondary, and vocational education. University enrollment has already increased fivefold since 2015, reaching 1.43 million students in 2024/2025 (UNICEF, 2024). However, challenges remain in education quality, with 80% of children not meeting minimum proficiency standards in reading and math (UNICEF, 2024).

Healthcare: Increase average life expectancy to 78 years. Reduce early mortality rates from major non-communicable diseases (oncological, cardiovascular, diabetes, respiratory) by 2.5 times. Uzbekistan's healthcare system was ranked 64th globally in the 2024 Healthcare Index, the best in Central Asia (CEOWORLD magazine, 2024). Newborn survival rates for low-birthweight infants have improved (e.g., 70% to 75% for 500-1500g; 80% to 82% for 1500-2000g) (UNICEF, 2024). Immunization coverage remains high at 96% (UNICEF, 2024).

Poverty Reduction: Reduce the poverty rate to below 8% by 2030. Significant progress has been made, with the poverty rate declining from 11% to 8.9% in 2024, lifting 719,000 people out of poverty through employment, entrepreneurship support, and social benefits (World Bank, 2024).

Pillar 2: Ensuring Population Welfare through Sustainable Economic Growth

This pillar outlines the macroeconomic and sectoral objectives to drive robust and inclusive economic expansion.

Goals: Achieving high and sustainable economic growth, ensuring macroeconomic stability, transforming the industrial sector, attracting significant investments, modernizing infrastructure, developing tourism, and promoting regional economic development.

KPIs:

GDP Growth: Achieve GDP of \$160 billion by 2030, with per capita GDP reaching \$4,000. Economic forecasts are robust: ADB projects 6.6% GDP growth for 2025 and 6.7% for 2026 (ADB, 2024). World Bank forecasts 6.5% for 2024, 5.9% for 2025, and 5.9% for 2026 (World Bank, 2024).

Inflation: Maintain inflation at 5-6%.

Investment: Attract \$250 billion in investments, including \$110 billion in foreign direct investment (FDI) by 2030. FDI inflows showed remarkable growth in 2024, increasing over 60% to \$34.9 billion, and are projected to reach \$42 billion in 2025 (Gazeta.uz, 2024a; World Bank, 2024b). Key investing countries include China and Russia, with significant investments in manufacturing, electricity, gas, and mining (Gazeta.uz, 2024a).

Private Sector Share: Increase the private sector's share in GDP to 80%.

Exports: Boost exports to \$45 billion.

Digitalization: Increase the share of the digital economy in GDP to 8%. The digital transformation has seen successes like “Uzum”, a local tech giant in e-commerce and fintech, demonstrating significant FDI and growth potential in the digital sector (Forbes, 2025).

Pillar 3: Water Resources Conservation and Environmental Protection

Recognizing the urgency of climate change and water scarcity in Central Asia, this pillar prioritizes environmental sustainability.

Goals: Ensuring water security, increasing green spaces, improving air quality, and promoting a circular economy.

KPIs:

Renewable Energy: Increase the share of renewable energy sources in electricity generation to 40% by 2030 (from 18% by end of 2024). Uzbekistan had an installed capacity of 2000 MW of solar and 600 MW of wind power by the end of 2024 (Power Uzbekistan, 2024; IEA, 2023).

Water Efficiency: Reduce water losses in agriculture by 25% and increase agricultural land covered by water-saving technologies to 1.3 million hectares. A \$200 million World Bank loan aims to modernize irrigation infrastructure, projected to reduce water losses by 540 million cubic meters annually and save 165 million kWh of electricity (World Bank, 2025b).

Afforestation: Increase green spaces to 30% by 2030. The "Yashil Makon" (Green Space) national project saw 138 million trees planted in spring 2024, and 257 green parks created nationwide (Ministry of Ecology, 2024).

Air Quality: Reduce atmospheric pollutant emissions. Uzbekistan is working with UNECE to develop an air pollutant emission inventory and intends to accede to the Air Convention (UNECE, 2024). A World Bank report identified heating, transport, and industry as main sources of air pollution, alongside windblown dust (World Bank, 2024f).

Pillar 4: Ensuring Rule of Law, Organizing Public Administration Focused on Serving the People

This pillar emphasizes governance reforms, aiming for transparent, accountable, and citizen-centric public administration.

Goals: Strengthening the rule of law, protecting human rights, enhancing public service delivery, fighting corruption, and modernizing public administration.

KPIs: Improve Uzbekistan's ranking in international indices related to governance, rule of law, and anti-corruption. Key reforms include optimizing state functions, reducing the state's footprint in the economy, and strengthening the independence of the judiciary (IMF, 2024).

Pillar 5: Consistent Continuation of the Policy Based on the Principle "Safe and Peaceful State"

This pillar outlines the foreign policy and national security objectives, emphasizing open, pragmatic, and proactive engagement with the international community, particularly within Central Asia.

Goals: Strengthening good-neighborly relations, promoting regional stability, and enhancing defense capabilities.

KPIs: Increase Uzbekistan's participation and influence in regional and international organizations. Foster a peaceful and predictable regional environment conducive to trade and investment.

ECONOMIC DIPLOMACY: A PROACTIVE GLOBAL OUTREACH

Uzbekistan's "Uzbekistan-2030" Strategy places significant emphasis on economic diplomacy as a primary driver for achieving its ambitious economic targets. This involves a multi-pronged approach aimed at attracting foreign investment, diversifying export markets, and forging strategic economic partnerships globally.

Attracting Foreign Direct Investment (FDI)

FDI is central to Uzbekistan's economic transformation, bringing not only capital but also technology, expertise, and access to new markets. The government has implemented a series of reforms to improve the investment climate:

Liberalization and Incentives: Tax reforms, simplification of business registration, and the establishment of free economic zones with preferential regimes (World Bank, 2024e). The Uzbekistan Direct Investment Fund (UzDIF), wholly owned by the sovereign wealth fund, plays a crucial role in co-investing in projects and assisting foreign investors, effectively de-risking investments and signaling government support (UzDIF, 2024).

FDI Growth: The results are evident in the significant surge in FDI. In 2024, foreign investment increased by over 60% to \$34.9 billion, with projections to reach \$42 billion in 2025 (Gazeta.uz, 2024a). China, Russia, and Saudi Arabia are among the leading investors.

Key Sectors for FDI: Investments are diversified across manufacturing (especially automotive and textiles), electricity and gas production, mining, and the rapidly growing digital economy (Gazeta.uz, 2024a).

Case Study: A notable success story is “Uzum”, a local tech ecosystem encompassing e-commerce, fintech, and banking. Its rapid growth and substantial foreign investment demonstrate Uzbekistan's potential in the digital economy and its appeal to tech investors (Forbes, 2025). The IT Park Tashkent is another initiative that has successfully attracted international IT companies and fostered a vibrant startup ecosystem (IT Park Uzbekistan, 2024).

EBRD Engagement: The European Bank for Reconstruction and Development (EBRD) has been a significant partner, investing €4.8 billion in 150 projects across Uzbekistan since 1992, with €1.3 billion in 2023 alone (EBRD, 2024a). Recent EBRD-backed projects include the construction of a modern glass fiber plant, investments in the pharmaceutical sector, and critical irrigation upgrades, all contributing to private sector development and green economy initiatives (EBRD, 2024a).

Expanding Trade Partnerships and Market Access

Uzbekistan's economic diplomacy extends to actively expanding its global trade footprint and securing better market access.

WTO Accession: A strategic priority is the accession to the World Trade Organization (WTO) by 2026 (UNCTAD, 2024). This will liberalize trade, integrate Uzbekistan more deeply into the global trading system, and enhance investor confidence.

Bilateral Trade Agreements:

- **Azerbaijan:** A strong partnership with Azerbaijan aims to boost bilateral trade to \$1 billion by 2030 (Daryo.uz, 2025a). Recent agreements encompass diverse sectors including environmental protection, science, higher education, industrial cooperation, agriculture, social protection, shipping, and shipbuilding. Discussions also include a joint project to export "green" energy to Europe (Daryo.uz, 2025a).
- **European Union (EU):** Uzbekistan is deepening ties with EU countries, including recent high-level visits to Hungary, Slovenia, and Italy. Agreements have been signed on climate change adaptation, science, innovation, peaceful use of nuclear energy, and various economic sectors such as transport, agriculture, textiles, and pharmaceuticals (Gov.uz, 2024a). The EU has also granted Uzbekistan GSP+ status, allowing duty-free access for over 6,200 Uzbek products to the EU market, significantly boosting exports (European Commission, 2023).

Multilateral Engagement: Uzbekistan actively participates in multilateral forums to promote economic cooperation. Discussions with China focus on expanding trade, investment, technology, and infrastructure, with proposals for an "Electronic Silk Road" and an "Industrial and Infrastructure Belt 'Central Asia – China'" (China Daily, 2024).

REGIONAL INTEGRATION: FOSTERING CENTRAL ASIAN SYNERGY

Uzbekistan's "Uzbekistan-2030" Strategy firmly positions the country as a driver of regional integration in Central Asia. Recognizing that shared challenges and opportunities necessitate collective action, Uzbekistan champions initiatives aimed

at enhancing connectivity, coordinating resource management, and fostering greater economic interdependence among its neighbors.

Connectivity and Transport Corridor

As a double-landlocked nation, enhancing regional transport connectivity is paramount for Uzbekistan to access global markets and boost trade. One of the central initiatives in this regard is the development of the Middle Corridor (Trans-Caspian International Transport Route). Uzbekistan actively promotes the development of the Middle Corridor, which connects Central Asia to Europe via the Caspian Sea, Azerbaijan, and Turkey. Uzbek cargo transit through this route has significantly increased, reducing reliance on traditional northern routes (Daryo.uz, 2025a). The route is crucial for diversifying logistics chains and shortening delivery times.

Another major undertaking is the Trans-Afghan Railway (Uzbekistan-Afghanistan-Pakistan - UAP). This ambitious project, aiming for completion by 2027, seeks to connect Uzbekistan to Pakistani seaports (Gwadar and Karachi) through Afghanistan. The railway is projected to significantly reduce cargo delivery times between Central Asia and South Asia (Gulf News, 2024; The Diplomat, 2025a). Recent high-level discussions have focused on accelerating its implementation, despite security and funding challenges in Afghanistan (The Diplomat, 2025a).

In parallel, Uzbekistan has also advanced cooperation on the China-Kyrgyzstan-Uzbekistan (CKU) Railway. After decades of discussions, the commencement ceremony for the construction of the CKU railway was held in June 2024, with construction on the Kyrgyz section set to begin in July 2025 (Gov.cn, 2024; Eurasianet, 2024). The estimated cost of the project is around \$8 billion, and it aims to shorten the route for goods from China to Europe and the Middle East by 900 kilometers, significantly cutting transit times and costs. This project holds immense geostrategic and economic importance, although concerns regarding Kyrgyzstan's potential debt burden have been noted (CA&CC Press, 2024).

Beyond physical infrastructure, Uzbekistan has prioritized trade facilitation as a means of enhancing competitiveness and connectivity. The government launched a National Trade Facilitation Roadmap 2025–2030 in collaboration with international partners. The country has achieved an 85% implementation rate of trade facilitation measures, the highest in Central Asia (UNECE, 2023). Initiatives like the "Central Asia Gateway," an online information hub for cross-border trade formalities, further streamline procedures (UNECE, 2023).

Energy Cooperation and Green Transition

Uzbekistan is a key player in Central Asian energy dynamics, focusing on both traditional and renewable energy cooperation. A notable initiative in this regard is the trilateral collaboration with Azerbaijan and Kazakhstan on a groundbreaking project to export "green" energy to Europe, potentially involving the laying of a subsea cable across the Black Sea. This initiative highlights a shift towards regional energy diversification and clean energy export capabilities (Daryo.uz, 2025a).

In parallel, Uzbekistan has been working to strengthen its domestic renewable energy infrastructure. With the support of a \$100 million loan from the World Bank, the country is integrating renewable energy into its electricity distribution networks, strengthening grid stability, which is crucial for regional energy trade (World Bank, 2024d).

Uzbekistan is also pioneering nuclear power in Central Asia, with plans for a large-scale nuclear power plant in cooperation with Russia's Rosatom, and exploring Small Modular Reactors (SMRs). This diversification is critical for meeting growing energy demands and enhancing regional energy security (World Nuclear News, 2024).

Water Management and Environmental Collaboration

Water scarcity represents a critical transboundary issue in Central Asia, a region where water insecurity affects an estimated 82 million people (The Jerusalem Post, 2025; Scissa, 2025). This profound challenge is exacerbated by rapid urbanization, population growth, economic development, and the inherent inefficiencies within irrigated agriculture.

The current water crisis is deeply rooted in the Soviet era's large-scale irrigation projects, primarily driven by cotton monoculture, which led to the severe overexploitation of the Amu Darya and Syr Darya rivers (Environmental Justice Foundation, 2017; European Parliamentary Research Service, 2015). This historical mismanagement resulted in catastrophic water losses, widespread desertification, soil salinization, and the dramatic desiccation of the Aral Sea. Since 1960, the Aral Sea has shrunk dramatically, with its volume decreasing by 73% to 90% and its surface area by over 50% (Micklin, 1993; The Aral Sea Crisis, n.d.), with some data indicating a 74.3% reduction in surface area by 2008 (ResearchGate, n.d.). The institutional frameworks established during this period were notably inefficient and lacked coordination (European Parliamentary Research Service, 2015).

As a downstream nation heavily reliant on these shared water resources, Uzbekistan actively participates in regional efforts to address water scarcity and promote sustainable management. The Aral Sea's desiccation serves as a potent historical warning, illustrating the profound environmental and socio-economic catastrophes that can arise from large-scale, centrally planned, and largely unilateral water management decisions that disregard ecological and downstream impacts (World Bank, n.d.). This historical context provides a crucial lens through which to analyze contemporary projects, highlighting the high stakes involved in transboundary water management.

Regional and Bilateral Cooperation: Progress and Persistent Challenges

Regional cooperation on water management in Central Asia operates through various mechanisms, with varying degrees of effectiveness. The Interstate Commission for Water Coordination (ICWC), established in 1992 following the Almaty Agreement, comprises five water ministers or their deputies tasked with managing water resources and ensuring sustainability (International Crisis Group, 2014). It includes basin water organizations for the Amu Darya and Syr Darya, fostering regional dialogue (IWMI, 2024).

However, despite its formal mandate, cooperation under the ICWC has been described as "insufficient" and its ability to effectively coordinate water management "limited" (International Crisis Group, 2014; Scissa, 2025). Many regional initiatives lack legal force, contributing to persistent conflicting national interests among member states (International Crisis Group, 2014). While international bodies like the International Water Management Institute (IWMI) engage with the ICWC, its functional limitations remain a significant hurdle (IWMI, 2024). The complexity of aligning five diverse national interests, particularly the upstream-downstream dynamics, proves more challenging than fostering agreement between closely aligned nations.

In contrast to the multilateral challenges, bilateral cooperation between Uzbekistan and Turkmenistan demonstrates more tangible progress. These nations have made significant strides, agreeing to establish an automated water accounting system on the Amu Darya river and restore hydro-posts (Uzbekistan.org, 2024). This initiative aims to ensure transparent water sharing, a critical step in building confidence and mitigating disputes. Discussions between their water ministries also focus on infrastructure maintenance, flood prevention, riverbank reinforcement, and efficient water use (Uzbekistan.org, 2024). Both countries plan joint research, exchange expertise on water-saving technologies, and enhance training programs, committing to utilize international financial institution grant funds for these projects (Uzbekistan.org, 2024). The effectiveness of this bilateral cooperation, especially on transparent data-sharing mechanisms, could serve as a model for broader regional collaboration, indicating that trust-building and practical solutions may be more achievable in targeted partnerships before scaling up to full regional consensus. Transparency through digital systems is key to overcoming historical mistrust and data opacity.

UZBEKISTAN'S INTERNAL MODERNIZATION AND EFFICIENCY DRIVE

Uzbekistan is proactively investing in domestic water efficiency, which yields direct benefits for its economy and indirectly contributes to regional water security. The World Bank has approved a \$200 million concessional credit to support Uzbekistan in modernizing its irrigation and drainage infrastructure (World Bank, 2025b). This project marks the first phase of a broader World Bank-supported regional program designed to improve water efficiency and conservation across Central Asia (World Bank, 2025b). Uzbekistan co-finance this initiative with \$23.2 million (World Bank, 2025b).

The country's irrigation infrastructure is largely outdated, a legacy of the Soviet era, leading to significant water losses and uneven distribution. Across Central Asia, obsolete water infrastructure can result in up to 40% water losses during irrigation (World Bank, 2025b). To address this, modernization projects in Uzbekistan focus on replacing earthen canals with concrete lining (259 km), rehabilitating pumping stations, and introducing water-saving technologies like drip irrigation (World Bank, 2025b). Key upgrades include re-sectioning and elevating canal beds for gravity-fed supply and installing hydraulic structures equipped with Supervisory Control and Data Acquisition (SCADA) systems and flowmeters for improved water control (World Bank, 2025b).

These efforts are anticipated to deliver substantial benefits:

- **Water Savings:** Annual water losses are expected to be reduced by approximately 540 million cubic meters (World Bank, 2025b).
- **Energy Efficiency:** Over 165 million kWh of electricity are projected to be saved annually, a critical outcome given that irrigation pumping stations consume 16% of Uzbekistan's national electricity use (World Bank, 2025b).
- **Agricultural Productivity:** The quality of irrigation service delivery is expected to be enhanced across 232,000 hectares of agricultural land, improving productivity and resilience (World Bank, 2025b).
- **Socio-Economic Benefits:** Approximately 180,000 water users, including 80,000 women, will directly benefit from improved access to reliable irrigation services, incentivizing private investments and supporting job creation in the irrigation and agrifood sectors (World Bank, 2025b).

Uzbekistan's internal modernization efforts are not merely about conserving water but represent a strategic investment in national energy security and economic diversification. By setting a precedent for efficient water use, these efforts indirectly contribute to regional water security by reducing overall demand on shared resources, potentially easing transboundary tensions over allocation. This demonstrates a proactive approach to sustainable development that addresses multiple systemic challenges simultaneously, highlighting the critical interconnectedness of the Water-Food-Energy-Climate Nexus.

The Qosh Tepa Canal: A New Geopolitical Fault Line

The construction of the Qosh Tepa Canal in northern Afghanistan by the Taliban regime represents a significant and potentially destabilizing new factor in Central Asian water dynamics. The canal's purpose is to divert water from the Amu Darya to convert 550,000 hectares of desert into farmland (German Economic Team, 2024; Radio Free Europe/Radio Liberty, 2023). The main canal is expected to be 285 km long, with construction commencing in early 2022. The first phase was completed in October 2023, and the second phase was reported to be 90% complete by December 2024 (German Economic Team, 2024).

This unilateral development poses critical implications for downstream countries, particularly Uzbekistan and Turkmenistan, which are heavily reliant on the Amu Darya's flow. Projections indicate a significant reduction in surface water levels in the Amu Darya basin (German Economic Team, 2024). The canal's construction highlights several critical challenges and issues. Afghanistan is not a party to any regional or international treaty on transboundary river waters, and the project commenced without consultation or formal agreements with downstream neighbors (German Economic Team, 2024; Radio Free Europe/Radio Liberty, 2023). This unilateral approach significantly increases the risk of diplomatic or economic retaliations. Furthermore, independent experts express skepticism regarding Afghanistan's technical expertise, noting "rudimentary" construction methods and a lack of oversight (Radio Free Europe/Radio Liberty, 2023). This raises substantial concerns about significant water loss through seepage, potentially leading to widespread soil salinization in the region (German Economic Team, 2024). A major breach in the canal was, in fact, reported in December 2023 (Radio Free Europe/Radio Liberty, 2023).

The Qosh Tepa Canal will further exacerbate the already dire Aral Sea situation and contribute to increased soil salinization in downstream agricultural areas (German Economic Team, 2024). It compounds existing problems such as land degradation and rapid glacier melt in the region (UN Climate Change, 2023). The socio-economic impacts are equally concerning: decreased crop yields could drive up prices of staple goods and negatively affect textile exports (German Economic Team, 2024). Rural populations, heavily dependent on agriculture, will be disproportionately affected by water shortages, potentially leading to increased migration, drinking water shortages, and the spread of diseases (German Economic Team, 2024). Such severe impacts could also trigger internal displacement and socio-political unrest within Afghanistan itself. Afghanistan's pursuit of its own water and food security through this project, without engaging in formal agreements, risks a "zero-sum" outcome where its development paradoxically endangers the water security and agricultural stability of its neighbors. This situation elevates the Kushtepa Canal from merely an environmental or agricultural issue to a profound geopolitical challenge that threatens regional stability, underscoring the urgent need for international mediation and a shift from isolationism to collaboration.

However, the region faces an escalating crisis, primarily driven by climate change (UN Climate Change, 2023) and the profound implications of unilateral actions such as the Kushtepa Canal. The canal's construction without comprehensive regional agreements poses substantial environmental, economic, and socio-political risks to downstream nations, echoing the historical catastrophe of the Aral Sea (German Economic Team, 2024). This situation underscores that while national development imperatives are legitimate, the transboundary nature of Central Asia's water resources necessitates a fundamental shift towards a more integrated, cooperative, and legally binding regional water governance framework. The deep awareness of the importance of water issues across Central Asian states offers a basis for optimism, but decisive, collective action remains paramount to avert further environmental degradation and ensure regional stability.

CHALLENGES AND OUTLOOK

Despite tremendous progress and ambitious objectives, Uzbekistan's "Uzbekistan-2030" Strategy confronts inherent obstacles that need ongoing monitoring and adaptive policy responses.

Internal challenges

The IMF and World Bank advocate for reducing the state's economic dominance, privatizing state-owned enterprises (SOEs), and increasing competition to promote a more dynamic private sector (IMF, 2024; World Bank, 2024c).

Human Capital Quality: While access to education and healthcare has improved, the quality of these services remains a challenge. For instance, UNICEF (2024) points to significant gaps in education quality, requiring sustained investment in curriculum reform, teacher training, and digital learning infrastructure.

Environmental pressures: Uzbekistan faces significant environmental challenges, including water shortages, air pollution from industrial emissions, transportation, and heating, and land degradation. The effective implementation of environmental legislation and the broad use of green technology are critical (UNECE, 2024; World Bank, 2024f).

Inclusive Growth: Although poverty has decreased, it is still important to ensure that the benefits of growth reach all sectors of society, particularly disadvantaged groups and rural communities. Regional gaps in development must also be addressed (World Bank, 2024c).

Regional and Geopolitical Challenges

Trans-Afghan Corridor Security: The long-term success of the UAP railway depends on the stability and security of Afghanistan (The Diplomat, 2025a).

CKU Railway Funding and Geopolitics: While promising, the CKU railway project's significant cost and probable debt consequences for Kyrgyzstan, along with regional geopolitical complications, necessitate cautious management and transparent finance procedures (CA&CC Press, 2024).

Transboundary Water Resources: Effective and fair sharing of transboundary water resources in Central Asia is a complicated task that requires strong legal frameworks and political will from riparian governments (IWMI, 2024). Climate change exacerbates the situation, emphasizing the need for collaborative action.

External economic shocks, fluctuations in commodity prices, and global geopolitical concerns may affect Uzbekistan's trade, investment, and economic stability.

Outlook and Opportunities

Despite these hurdles, the outlook for Uzbekistan's "Uzbekistan-2030" Strategy remains mostly favorable, supported by several enabling factors.

The present leadership's persistent commitment to reforms and open regionalism creates a great basis for future success. By maintaining investments in education, skills development, and job creation, the country may realize a significant demographic dividend from its youthful and growing population.

Uzbekistan's strategic location in Eurasia makes it a natural transportation and commerce center, especially with the development of new trade corridors.

Increased political cooperation among Central Asian republics presents opportunities for collaborative infrastructure projects, economic liberalization, and joint problem-solving, particularly in sectors such as energy and water.

Finally, the emphasis on digital transformation, a green economy, and value-added manufacturing presents pathways for economic diversification beyond traditional industries.

CONCLUSION

Uzbekistan's "Uzbekistan-2030" Strategy represents a profound commitment to national transformation, with economic diplomacy and regional integration serving as its fundamental pillars. The country's proactive global outreach has resulted in a significant surge in foreign direct investment, diversified trade partnerships, and strengthened bilateral ties with key economic actors like the EU and Azerbaijan. The success of initiatives such as the Uzum digital ecosystem and substantial investments facilitated by the UzDIF and EBRD underscore the efficacy of this outward-looking economic strategy.

Concurrently, Uzbekistan's determined pursuit of regional integration is reshaping the Central Asian landscape. Ambitious infrastructure projects like the Trans-Afghan Railway and the China-Kyrgyzstan-Uzbekistan railway promise to fundamentally alter regional connectivity, positioning Central Asia as a vital Eurasian transit corridor. Furthermore, collaborative efforts in energy, particularly in green energy export, and crucial advancements in water resource management, demonstrate a growing commitment to shared prosperity and environmental sustainability across the region.

While formidable challenges remain, including the need for further market liberalization, continued improvements in human capital quality, and addressing persistent environmental pressures, the momentum generated by the "Uzbekistan-2030" Strategy is undeniable. The strong political will, combined with a youthful demographic and strategic geographic location, provides a robust foundation for continued progress. By skillfully balancing its pursuit of global economic integration with deepening intra-regional cooperation, Uzbekistan is not only steering its own course towards sustainable development but also solidifying its role as a linchpin of stability, connectivity, and shared prosperity in Central Asia. The successful realization of this dual pursuit will be a testament to Uzbekistan's transformative vision and its potential to unlock a new era of development for the entire region.

FUNDING

The authors report no financial or non-financial support from individuals or organizations not listed as co-authors.

CONFLICTS OF INTEREST

The authors have no competing interests to disclose.

AUTHORS' CONTRIBUTIONS

JM: formal analysis, investigation, resources, data curation, writing – original draft, visualization; UK: conceptualization, methodology, validation, writing – review & editing, supervision, project administration.

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