

# CHINA-PAKISTAN ECONOMIC CORRIDOR (CPEC): A REVIEW ON OPPORTUNITIES AND CHALLENGES FOR SINDH'S LOGISTICS AND TRANSPORT ECONOMY

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## Abstract

*The China-Pakistan Economic Corridor (CPEC) is one of the most transformative projects of the twenty-first century, designed to strengthen trade, connectivity, and development across South Asia, Central Asia, and the Middle East. Anchored within China's Belt and Road Initiative (BRI), CPEC links Gwadar Port in Baluchistan with Kashgar in China's Xinjiang region through a vast network of highways, railways, pipelines, and special economic zones. For Pakistan, the project promises to address structural weaknesses in energy supply, transport infrastructure, and industrial productivity. Sindh, in particular, stands as the pivotal province in this development due to its ports, industries, and financial hubs. The potential benefits for Sindh include job creation, modernization of logistics, industrial clustering, and enhanced trade integration. However, alongside these opportunities lie significant challenges, including security concerns, environmental degradation, governance weaknesses, and risks of industrial displacement. This paper critically evaluates these opportunities and challenges through a descriptive analysis based on secondary sources. The findings suggest that the success of CPEC depends not only on the construction of infrastructure but also on the implementation of transparent governance, sustainable environmental policies, and protective frameworks for domestic industries. Sindh's logistics and transport economy could emerge as a regional powerhouse if these challenges are strategically managed. The study concludes that inclusive growth, equitable benefit distribution, and regional cooperation are essential for ensuring that CPEC fulfills its potential as a catalyst for Pakistan's socio-economic transformation.*

**Keywords:** CPEC, Opportunities, Security, Challenges, Transport Economy

## INTRODUCTION

### *Historical Background of Sino-Pakistan Relations*

The relationship between Pakistan and China has often been described as one of the most resilient and dependable bilateral partnerships in modern international politics. Since the early 1960s, when the two countries first established formal ties, Pakistan has consistently supported China's diplomatic positions in international forums, while China has provided Pakistan with military, political, and economic assistance (Khan & Motawa, 2010). During the Cold War, Pakistan played a key role in facilitating China's rapprochement with the United States by acting as a diplomatic bridge in the early 1970s, an event that significantly strengthened the foundations of trust between the two nations (Small, 2015). Over the decades, Pakistan and China have consistently aligned their interests in response to regional challenges, most notably their shared rivalry with India. China's military and economic assistance to Pakistan, particularly after the Indo-Pakistani wars of 1965 and 1971, cemented the relationship as one grounded in mutual necessity and trust (McCartney, 2021).

Economic cooperation between the two countries also has historical depth. Pakistan was among the first countries to open its economy to Chinese trade and investment at a time when China was still relatively

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isolated from global markets (Abid & Ashfaq, 2015). The Karakoram Highway, completed in the 1970s, symbolized not only the physical connection between the two nations but also their shared vision of cooperation despite geographical and political obstacles. It was, in many ways, a precursor to the China-Pakistan Economic Corridor (CPEC), laying the foundation for future infrastructure connectivity (Raza, 2018). Importantly, this historical trajectory has cultivated a perception in Pakistan of China as an “all-weather friend,” contrasting with the conditional and sometimes inconsistent support received from Western allies (Rehman et al., 2018).

The enduring nature of the Sino-Pakistani relationship has allowed both countries to deepen ties in the twenty-first century in response to shifting geopolitical realities. China’s rise as the world’s second-largest economy, and its need for secure trade routes, has intersected with Pakistan’s long-standing search for sustainable economic growth and infrastructure development (Hadi et al., 2018). The CPEC initiative therefore represents not an isolated event but rather the culmination of decades of trust-building and shared strategic calculations. Sindh, as a key province in Pakistan’s economy, has become central to this partnership due to its ports, industries, and logistical significance (Moin & Qadri, 2020). Thus, to understand the promise and perils of CPEC for Sindh, one must first recognize how the project is embedded in the broader historical narrative of Sino-Pakistani ties, which have consistently prioritized strategic alignment and mutual benefit (Hassan, 2018).

### ***The Belt and Road Initiative and the Genesis of CPEC***

In 2013, Chinese President Xi Jinping formally announced the Belt and Road Initiative (BRI), a global development strategy designed to improve connectivity and cooperation between Asia, Africa, and Europe through large-scale infrastructure projects (Bhattacharyay et al., 2012). The BRI is widely regarded as the most ambitious foreign policy and economic plan in modern history, with China committing to invest trillions of dollars in roads, railways, pipelines, and maritime infrastructure across more than 60 countries (Yawar et al., 2025). Within this framework, the China-Pakistan Economic Corridor (CPEC) was declared a “flagship project,” highlighting its importance to Beijing’s broader vision (Abid & Ashfaq, 2015). The proposed corridor spans approximately 3,000 kilometers from Gwadar Port in Pakistan’s Baluchistan province to Kashgar in Xinjiang, passing through multiple provinces including Sindh. Its components include modern highways, expanded railways, energy pipelines, and special economic zones (Rehman et al., 2018).

CPEC is of immense importance to China because it provides a shorter and more secure route to the Arabian Sea, bypassing the Malacca Strait—a critical chokepoint vulnerable to naval blockades or disruptions (Small, 2015). For Pakistan, CPEC is equally significant as it promises to address some of the country’s most pressing economic issues, such as chronic energy shortages, underdeveloped infrastructure, and sluggish industrial productivity (Makhdoom et al., 2018). Initial investments were estimated at \$46 billion, later expanded to more than \$62 billion, making it the largest foreign direct investment package in Pakistan’s history (McCartney, 2021).

The genesis of CPEC also reflects Pakistan’s growing dependence on Chinese investment as Western support became less reliable in the post-9/11 era (Hadi et al., 2018). Pakistan’s inclusion in BRI is not merely an economic decision but also a geopolitical one, as Beijing sees Islamabad as a strategic partner capable of providing access to energy-rich regions in the Middle East and Central Asia. For Sindh, this translates into an opportunity to modernize its infrastructure and leverage its ports for expanded trade and industrial activity (Moin & Qadri, 2020). The genesis of CPEC thus encapsulates a convergence of

Chinese strategic imperatives and Pakistani developmental aspirations, situating Sindh at the center of this ambitious corridor (Isran et al., 2019).

### ***Sindh's Strategic Importance***

Sindh holds unparalleled importance within Pakistan's economic and logistical framework. As the home of Karachi, the country's largest metropolis and financial capital, Sindh contributes a significant share to Pakistan's GDP and government revenue (Hassan, 2018). Karachi's two major ports—Karachi Port and Port Qasim—handle more than 90 percent of Pakistan's international trade, serving as the primary gateways for imports and exports (Moin & Qadri, 2020). The province also contains industrial estates such as the Karachi Export Processing Zone and Sindh Industrial Trading Estate, which house a substantial portion of Pakistan's manufacturing capacity (Raza, 2018). These factors make Sindh indispensable for the success of CPEC, as any corridor linking Gwadar to inland markets must ultimately pass through Sindh's ports and logistical hubs.

The importance of Sindh is further enhanced by its geographic location. Positioned along the Arabian Sea, the province not only connects Pakistan to global shipping lanes but also provides China with direct maritime access through Gwadar and Karachi (Abid & Ashfaq, 2015). This geographic centrality has transformed Sindh into a focal point of regional trade, linking South Asia with the Middle East and beyond (Rehman et al., 2018). For CPEC, Sindh's transport economy is not merely supplementary but foundational, as improved connectivity within the province is necessary for the corridor's operational viability (McCartney, 2021).

Sindh's strategic role also extends to its energy sector. The province is rich in coal reserves, particularly in the Thar region, which has been integrated into CPEC's energy projects to help alleviate Pakistan's chronic electricity shortages (Hadi et al., 2018). Investments in energy infrastructure in Sindh not only promise to reduce load-shedding but also to support industrial growth and logistics efficiency (Makhdoom et al., 2018). In this way, Sindh stands as the backbone of Pakistan's integration into the BRI framework, underscoring its centrality to CPEC's success (Small, 2015).

### ***Opportunities for Sindh***

The most immediate and visible opportunity that CPEC offers to Sindh is the modernization of its transport and logistics infrastructure. Pakistan's transport sector has historically lagged behind regional standards, with outdated road networks, poorly maintained railways, and congested port facilities (Rehman et al., 2018). These inefficiencies have increased transaction costs for businesses, undermined trade competitiveness, and discouraged foreign investors from fully engaging with the Pakistani market. Sindh, as the economic and maritime hub of the country, has been disproportionately affected by these structural weaknesses (Moin & Qadri, 2020). Through CPEC, large-scale investment in highways and railways will link Sindh's ports not only with Gwadar but also with industrial centers in Punjab, Khyber Pakhtunkhwa, and Gilgit-Baltistan. By reducing transport costs and improving the reliability of trade routes, these upgrades can significantly enhance the efficiency of Pakistan's supply chains (Makhdoom et al., 2018).

Another significant opportunity lies in employment generation. Infrastructure development under CPEC requires labor across multiple sectors including construction, engineering, logistics, and security. For Sindh, where urban unemployment remains a pressing challenge, these projects can provide critical job opportunities, particularly for youth entering the labor market (Hadi et al., 2018). In addition, the establishment of Special Economic Zones (SEZs) near Karachi is expected to attract foreign direct investment in manufacturing, thereby creating sustained employment beyond the initial construction

phase (Raza, 2018). These SEZs are designed to cluster industries in specific locations where they can benefit from improved infrastructure, tax incentives, and easier access to export markets (Isran et al., 2019). The multiplier effect of such investments could stimulate entrepreneurship, small business growth, and broader economic activity in Sindh.

CPEC also provides Sindh with opportunities to expand its energy base. Chronic energy shortages have long constrained the province's industrial productivity and logistics operations (Rehman et al., 2018). Through CPEC, significant investments are being directed into coal, wind, and solar power projects in Sindh, particularly in the Thar region (Moin & Qadri, 2020). These projects promise not only to stabilize the power supply but also to create downstream benefits by reducing production costs and enhancing competitiveness for local industries (Hassan, 2018). Furthermore, the expansion of energy infrastructure in Sindh can support rural electrification, thereby reducing regional inequalities and supporting inclusive development (Abid & Ashfaq, 2015).

The opportunities of CPEC extend to trade integration as well. By linking Sindh's ports with overland trade routes to China and Central Asia, the province can serve as a logistical bridge between South Asia and the broader Eurasian region (Small, 2015). This connectivity has the potential to transform Karachi into a hub of global commerce, similar to how Singapore and Dubai leveraged their strategic locations to become world-class logistics centers (McCartney, 2021). For Sindh's businesses, improved access to global markets could lead to export diversification, technology transfer, and enhanced competitiveness (Hadi et al., 2018). Taken together, these opportunities underscore Sindh's potential to emerge as the primary beneficiary of CPEC, provided that the province leverages these advantages effectively (Makhdoom et al., 2018).

### ***Challenges for Sindh***

While the potential opportunities of CPEC are substantial, they are counterbalanced by a set of challenges that, if left unaddressed, could limit the corridor's long-term benefits for Sindh. One of the foremost challenges is security. Karachi, despite being Pakistan's commercial capital, has a long history of political violence, ethnic tensions, and militant activity (Abid & Ashfaq, 2015). CPEC projects, particularly those involving foreign workers, have been targeted by hostile groups, raising concerns about the safety of infrastructure and personnel (McCartney, 2021). Ensuring security along transport corridors and in industrial zones is therefore a prerequisite for the success of CPEC in Sindh (Raza, 2018). Without robust security arrangements, investors may hesitate to fully commit to long-term projects in the province.

Governance is another critical challenge. Pakistan's bureaucratic inefficiencies, widespread corruption, and lack of transparency have often undermined development initiatives in the past (Isran et al., 2019). In Sindh, governance issues are further compounded by political rivalries and administrative fragmentation, which can delay project implementation and reduce efficiency (Hassan, 2018). The sheer scale of CPEC investments makes it essential that governance mechanisms are strengthened to ensure accountability and effective coordination (Makhdoom et al., 2018). Without such reforms, projects risk cost overruns, mismanagement, and uneven distribution of benefits.

Environmental sustainability also poses a major challenge. Large-scale construction of highways, railways, and industrial zones inevitably generates environmental stress through deforestation, pollution, and displacement of communities (Hadi et al., 2018). In Sindh, where urban areas already struggle with air pollution and water shortages, CPEC-related projects could exacerbate ecological pressures (Moin & Qadri, 2020). The Thar coal projects, while addressing energy shortages, raise concerns about carbon emissions and water consumption in an already arid region (Raza, 2018). Unless environmental

safeguards are integrated into planning and implementation, the long-term costs of ecological degradation may outweigh the immediate economic benefits (Rehman et al., 2018).

Finally, the threat of industrial displacement looms large. While CPEC promises to attract Chinese investment and technology, local industries may find it difficult to compete with Chinese firms that benefit from economies of scale, advanced technologies, and stronger financial backing (Isran et al., 2019). This asymmetry could result in domestic producers being marginalized or even forced out of key sectors, particularly in manufacturing and logistics (Hassan, 2018). For Sindh, where local industries are vital to employment and income generation, the influx of Chinese competition without adequate protective measures could undermine the province's long-term economic stability (Khan & Motawa, 2010). These challenges highlight the need for comprehensive strategies that balance foreign investment with the protection of local industries and the environment.

### ***Comparative Examples and Lessons***

The experience of other countries participating in China's Belt and Road Initiative offers useful lessons for Sindh. In Central Asia, for example, Chinese investments in infrastructure have improved regional connectivity but also raised concerns about debt sustainability (Bhattacharyay et al., 2012). Kazakhstan and Kyrgyzstan, while benefiting from new highways and pipelines, have faced public criticism over the perception of excessive dependence on China and the potential for sovereignty erosion (Small, 2015). Similarly, in parts of Africa, particularly Kenya and Ethiopia, Chinese-funded railway and port projects have stimulated trade but also triggered debates about environmental sustainability and the crowding out of local industries (Abbondanza & Souza, 2019).

For Sindh, these international experiences underscore the importance of adopting a cautious but proactive approach to CPEC. Transparency in contracts, adherence to international environmental standards, and meaningful engagement with local communities are crucial to ensuring that projects generate broad-based benefits (Rehman et al., 2018). Moreover, lessons from other countries reveal the necessity of diversifying partnerships to avoid overdependence on a single country (McCartney, 2021). While Chinese investment provides critical opportunities, Pakistan must ensure that local stakeholders retain agency in decision-making processes to avoid the pitfalls observed elsewhere (Hadi et al., 2018).

Another lesson comes from Southeast Asia, where countries like Vietnam and Malaysia have successfully integrated Chinese investment while maintaining strong domestic industry protections (Raza, 2018). These cases demonstrate that carefully crafted policies can maximize the benefits of Chinese capital and expertise while preventing local economies from being undermined. Sindh must similarly adopt regulatory frameworks that encourage collaboration with Chinese firms while ensuring that domestic industries remain competitive (Isran et al., 2019). By learning from these global experiences, Sindh can chart a path that leverages CPEC for sustainable development while mitigating the risks of overdependence, environmental degradation, and industrial displacement (Moin & Qadri, 2020).

### ***Critical Discussion***

The analysis of opportunities, challenges, and comparative lessons suggests that CPEC is a double-edged sword for Sindh's logistics and transport economy (Silva, 2025). On the one hand, the corridor provides unprecedented opportunities to modernize infrastructure, expand industrial capacity, and enhance Pakistan's global trade integration (Abid & Ashfaq, 2015). On the other hand, security risks, governance weaknesses, environmental threats, and industrial displacement represent significant hurdles that could limit the long-term effectiveness of the initiative (McCartney, 2021). The critical issue, therefore, is not

whether CPEC has the potential to transform Sindh's economy—it clearly does—but whether the province and Pakistan as a whole can manage the associated risks effectively (Rehman et al., 2018).

Policymakers must recognize that infrastructure development alone is insufficient to guarantee sustainable growth. Without complementary reforms in governance, industry, and environmental protection, CPEC's benefits may be unevenly distributed and short-lived (Hadi et al., 2018). Sindh, in particular, must develop policy frameworks that protect domestic industries, promote skill development among local workers, and integrate environmental safeguards into project planning (Isran et al., 2019). Such measures will ensure that the corridor strengthens, rather than weakens, the province's long-term economic resilience (Hassan, 2018).

Moreover, the geopolitical implications of CPEC demand careful management. While Pakistan stands to benefit from China's growing presence in the region, it must also navigate the concerns of neighboring countries and global powers that view the project with suspicion (Small, 2015). Sindh, as the logistical hub of CPEC, will inevitably be affected by these geopolitical dynamics, making it essential for policymakers to balance economic imperatives with diplomatic considerations (Khan & Motawa, 2010). Ultimately, the success of CPEC in Sindh will depend on Pakistan's ability to adopt a balanced approach that integrates economic growth with social inclusivity, environmental sustainability, and strategic foresight (Moin & Qadri, 2020).

### CONCLUSION

The China-Pakistan Economic Corridor is more than an infrastructure initiative; it is a blueprint for regional transformation that has the potential to redefine Pakistan's economic trajectory. Sindh, owing to its ports, industries, and financial networks, lies at the very heart of this transformation (Moin & Qadri, 2020). By modernizing roads, railways, and energy networks, CPEC promises to turn Sindh into a logistics hub of South Asia, comparable to regional giants such as Dubai and Singapore (Rehman et al., 2018). The opportunities for Sindh are vast: enhanced connectivity, expanded industrial capacity, job creation, and deeper integration into global supply chains (Raza, 2018). Energy projects in Thar and infrastructure upgrades in Karachi could directly improve industrial productivity and strengthen Sindh's role as Pakistan's commercial backbone (Hadi et al., 2018). Yet, these opportunities cannot be considered in isolation from the challenges. Security risks in Karachi and along the corridor remain a persistent threat to infrastructure and investment (Abid & Ashfaq, 2015). Governance issues—ranging from bureaucratic inefficiency to corruption—can delay projects and dilute benefits (Isran et al., 2019). Environmental sustainability, particularly in urban Sindh and in coal-dependent projects like Thar, raises serious concerns about long-term ecological costs (McCartney, 2021). Furthermore, unchecked Chinese competition could displace local industries and undermine domestic economic sovereignty if protective measures are not enforced (Hassan, 2018). The balance between opportunity and risk ultimately determines the real value of CPEC for Sindh. Policymakers must ensure that investments are accompanied by reforms in governance, industry protection, and environmental regulation (Makhdoom et al., 2018). Moreover, the lessons from other Belt and Road countries demonstrate that transparency and stakeholder engagement are crucial for avoiding the pitfalls of debt, environmental damage, and overdependence (Abbondanza & Souza, 2019). Sindh must adopt such lessons if it is to fully benefit from CPEC.

In conclusion, CPEC has the potential to elevate Sindh's logistics and transport economy into a regional and global powerhouse. However, this potential will only be realized if Pakistan adopts inclusive policies that distribute benefits equitably, safeguard local industries, and prioritize environmental sustainability

(Small, 2015). By strategically managing challenges, Sindh can transform itself into a dynamic hub of trade and logistics, positioning Pakistan as a central player in the global economy.

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