ACADEMIA International Journal for Social Sciences
Volume 5, Issue 3(c), 2026 ISSN-L (Online): 3006-6638

CPEC at Ten: Achievements, Failures, and Future Prospects of the China–Pakistan Economic Corridor (2015–2025)

Ahmed Nawaz Khan
ahmednawazkhan426@gmail.com
MPhil International Relations Scholar, Department of International Relations, University of Balochistan, Quetta.

Abdul Qadir
qadirmengall@gmail.com
Assistant Professor, Department of International Relations, University of Balochistan, Quetta.

Corresponding Author: Ahmed Nawaz Khan ahmednawazkhan426@gmail.com

Received: 14-02-2026 **Revised:** 01-03-2026 **Accepted:** 15-03-2026 **Published:** 29-03-2026

ABSTRACT

The China–Pakistan Economic Corridor (CPEC), formally opened in April 2015 with an initial USD 46-billion investment, which got increased to USD 62-billion, is the largest bilateral development project in Pakistan's post-independence history, and is the flagship project of China's Belt and Road Initiative (BRI). This article takes a holistic empirical and theoretical examination of CPEC over the entire first decade of its implementation between April 2015 and April 2025. The article, analyzing the corridor using Liberal Internationalism as the main analytical lens with dependency theory and international political economy lenses, assesses its performance in four key areas: energy and infrastructure development, industrial development through Special Economic Zones (SEZs), regional socio-economic equity, and governance transparency. The article finds that the first decade of CPEC is a complex experience of development with multiple internal variations based on the data gathered from the Pakistan Economic Survey, NEPRA State of Industry Reports, IMF Article IV consultations and the Annual Reports of CPEC Authority. The most quantifiable success of the corridor is the installation of around 8,000-8,400 Mega watts of electricity generation capacity, which has helped Pakistan reduce its electricity deficit. In the period between 2016 and 2018, when the construction industry was at its peak, the average rate of GDP growth was 5.0 per cent. These successes, however, are offset by the following realities: a power sector circular debt of around PKR 3.0 trillion by 2025; a decade-long deadlock over project modernisation of ML-1 railway line; opaque governance structures and weak parliamentary accountability. Eventually, the authors debated that Liberal Internationalism offers only incomplete theoretical explanatory advantage for the results of CPEC and that it must be complemented by a visual aspect that is sensitive to the distributional asymmetry and functional power instability. Recommendations for the second decade of CPEC are inclined towards evidence-based and have focused on resolving circular debt, ML-1 phasing and inclusion of Balochistan in development in particular.

Keywords: *CPEC, China–Pakistan Economic Corridor, Belt and Road Initiative, Liberal Internationalism, Pakistan development, Gwadar, Balochistan, energy policy, Special Economic Zones, circular debt*

INTRODUCTION

The CPEC was formally opened up in April 2015 by President Xi Jinping during his visit to Islamabad and is the most significant bilateral development initiative in Pakistan's post-Independence history. CPEC includes a wide range of energy generation projects, transport infrastructure, Special Economic Zones, and emerging cooperation in digital, agricultural and knowledge economy sectors with an initial investment commitment of USD 46 billion, which was later upgraded to USD 62 billion in the next ten years (Afzal &

Naseem, 2018). CPEC is the flagship of China's Belt and Road Initiative and has therefore been the subject of constant scholarly and policy debates, leading to one of the most voluminous literature in the study of South Asian affairs.

The launch of the corridor happened at a time of a great deal of developmental stress in Pakistan. Industry and household welfare was being stifled by an electricity shortage of 6,500 to 7,000MW. The average speed of the Pakistan Railways was 40 kilometres per hour on deteriorating tracks and foreign direct investment (FDI) had dropped from USD 5.4 billion in fiscal year 2006–07 to around USD 1.6 billion in 2014–15. In 2013, the country had its 15th IMF programme (NEPRA, 2014; World Bank, 2024). In this context, China's financing offer was an unprecedented offer: one bilateral partner to invest in infrastructure on an unprecedented scale and at unprecedented speed, a level neither the multilateral institutions nor the commercial market would dare to think about. The CPEC was welcomed by both the government and opposition as a "game-changer" and a recognition of the special nature of the China–Pakistan strategic partnership (Small, 2015).

One decade of implementation has yielded enough empirical basis to rigorously evaluate the results achieved, the costs incurred and by whom. This article does that analysis by reviewing CPEC's performance in four main analytical areas, and offers evidence-based recommendations for the second decade of CPEC (2025-2035).

LITERATURE REVIEW

CPEC in Scholarly Discourse

The scholarship of CPEC has developed considerably in the past decade, shifting from a mostly projective perspective to a more empirical and critical. In Small's' (2015) groundbreaking work he had concluded that talking about CPEC without considering it as a strategic tool for China's Indian Ocean policy and Pakistan's development goals is utterly impossible. Meanwhile, Hussain (2017) gave early employment and macroeconomic projections whereas Husain (2020) provided more critical analyses of fiscal sustainability and the asymmetric nature of Chinese financing arrangements. Javid (2019) and Ahmad and Ghulam (2021) explored the impact of CPEC on Balochistan and governance gaps in general. Ali et al (2020) showed the energy investment through the CPEC led to agglomeration effects, which resulted in benefits to already developed areas. Shah's (2022) narration of martial capitalism in Pakistan is the most structurally complex account of the opacity of the governance structure of the corridor.

Infrastructure literature, such as that of the joint ADB, World Bank, DFID, and JICA (2018) assessment on transport corridors in South Asia, shows that the developmental impacts of infrastructure critically rely on complementary governance reform and institutional capacity. The energy additions that CPEC provided were achieved without the grid modernisation that validated the fiscal crisis that the circular debt would bring on, as shown by Ul-Haq et al. (2021).

Theoretical Framework

The analysis used in this article is derived from the concept of Liberal Internationalism. Liberal Internationalism, built on the cornerstone of Keohane and Nye's (1977) account of complex interdependence, and developed by Ruggie's (1992) discussion of multilateral institution innovation, posits that economic cooperation between states yields positive-sum interdependence, new institutional innovations, and a more stable and peaceful regional order. Its usefulness in the analysis of the CPEC is

precisely because of the official framing of the corridor as a "mutual gains" project, which corresponds directly with the theoretical assumptions of Liberalism, making the empirical testing systematic.

The limitations of the model are also productive analytically. Liberal Internationalism has been criticised for its relative neglect of distributional imbalances between unequal partners and for its positive views of the conflict reducing potential benefits of economic integration as demonstrated by CPEC. Dependency theory (Frank, 1966; Wallerstein, 1974) focuses on the structural power dynamics that are tumbled within the China–Pakistan investment relationship. Theories of international political economy (Helleiner, 1994; Shah, 2022) shed light on the interests of the domestic elite that have influenced the architecture of governance in the corridor. The article uses all three of these approaches to produce a “full” account of CPEC's first decade from a theoretical perspective.

METHODOLOGY

The research design of this study is qualitative analytical research which is suitable to be used in an evaluation study of a complex multi-domain policy over a longitudinal time frame. Given that the research is descriptive-analytical in character, it will evaluate the performance of the CPEC during the next decade from 2015 to 2025, based on the aims outlined in the official bilateral joint statements, CPEC Long-Term Plan (2017-2030) and the project commitments of the CPEC Authority. The study is based on secondary data from authoritative official, multilateral and academic sources such as the Pakistan Economic Survey (2015-2024), NEPRA State of Industry Reports (2014-2023), CPEC Authority Annual Reports (2021-2023), IMF Article IV consultations report (2024, 2025), World Bank World Development Indicators (2024) and academic publications (peer-reviewed) from 2015-2025.

Data analysis is conducted in three complementary ways: comparative longitudinal analysis of important indicators related to CPEC implementation over time; theoretical proposition testing, which tests the Liberal Internationalist propositions against the data; and comparative BRI analysis, which compares the case of CPEC with similar projects financed by China in Kenya, Sri Lanka, and Indonesia. This three-way confirmation of the methods permit for outcomes that are verifiable and theoretically verified.

FINDINGS AND RESULTS

Energy and Infrastructure: Achievement and Fiscal Paradox

The most unequivocally empirical first decade success of CPEC can be attributed to the energy sector. Thanks to the installation of around 8,000 to 8,400 megawatts of power generation capacity, largely through nine major projects involving coal, hydropower, wind power and solar power, Pakistan's electricity deficit has been reduced to around 2,000 megawatts from around 6,500 megawatts in 2013 (NEPRA, 2023). The results of Rehman et al. (2018) show that the duration of load shedding significantly decreased when the early harvest energy projects started operations from 2016 to 2018. The growth rate of GDP was 5.0 per cent in the period 2016-18, during which construction activity was at its height, compared with 3.4 per cent over the previous five years.

The achievements are seriously marred by Pakistan's power sector circular debt issue. The circular debt also has increased from PKR 1.1 trillion in 2018 to around PKR 3.0 trillion by 2025 (Ministry of Energy, 2023). The cost of electricity is estimated to be 60 per cent of the per-unit cost of capacity payments to Independent Power Producers that are part of the CPEC, which has reduced a significant amount of the benefits of lower load shedding. In fact, Kessides (2012) foresaw this scenario: If the power supply industry experiences large-scale capacity expansion without demand-side governance reforms, the financial

imbalance of the industry will be worsened systematically over time. After ten years of negotiations, the construction of the ML-1 railway modernisation project, which is expected to run 1,872 kilometres from Karachi all the way to Peshawar at a cost of USD 9.2 billion, remains completely stalled.

Special Economic Zones: Designation versus Activation

CPEC has identified 5 priority SEZs, Rashakai, KPK, Allama Iqbal Industrial City, Punjab, Dhabeji, Sindh and Bostan, Balochistan and the ICT Model Industrial Zone, Islamabad. For all five sites, the distance between zone designation and industrial activation is still significant, but has not narrowed in the past 10 years. Rashakai SEZ is the most advanced operational zone in terms of occupancy with less than 30 per cent of designated space (Board of Investment, 2024). Bostan SEZ, Balochistan, has experienced the least development, due to poor connectivity, insufficient power supply and lack of security that prevents investment. Connectivity advantages are not enough without the power to implement contracts, anticipate regulations, and assure political steadiness (Farole, 2011, Aggarwal, 2010, Zeng, 2015).

Regional Equity: The Development Paradox

Most important aspect will be the geographical spread of the investments under CPEC in 10 years. The percentage of CPEC investment is estimated to be 60 per cent in the Punjab and Sindh. The paradoxical situation in Balochistan is that it has 12 per cent of total investment in the province, while the poverty headcount in the province is at its highest at 52 per cent (PSLM, 2020) and is also the province where the road to the Arabian sea is laid. As well, Ali et al. (2020) demonstrate that spatial inequality is deepened with time as an integral part of infrastructure-led development, if not explicitly addressed in policy/regulatory frameworks. Some societal costs registered in Balochistan are displacement of handcrafted fishing communities, security perimeter limitation around Gwadar, and land risk (Javid, 2019, Human Rights Watch, 2023). According to the security analysts, some 287 incidents targeting CPEC infrastructure in Balochistan and Khyber Pakhtunkhwa (KP) have been reported between 2015 and 2023 (SATP, 2023).

Governance and Transparency

Governance structure features that, at the same time, have allowed for delivery of infrastructure and have limited accountability. The 13 formal meetings of JCC from 2015 to 2025 are a bilateral meeting between diplomats and not an accountability body; specific terms related to the financing of the CPEC have not been shared despite numerous parliamentary requests. Pakistan stands at 133rd position in the Corruption Perceptions Index (CPI) 2023 by Transparency International (TI) in institutional context. A major drawback of the CPEC is the lack of parliamentary oversight, in the opinion of Afzal and Naseem (2018). The CPEC Authority Act of 2020 was a step in the right direction as a genuine institutionalization, but it was constrained by the lack of capacity and the issue of the authority of the CPEC Authority over existing bilateral ministerial relations (Husain, 2020).

DISCUSSION

Empirical findings in a structured manner help to assess the analytical and empirical validity of Liberal Internationalism for CPEC. The predictions of the framework are partly confirmed, but not completely. The most convincing evidence is institutional development – the establishment of the CPEC Authority, establishment of the JCC as a formalized bilateral forum, and the development of SEZ legal frameworks – that continuous economic cooperation has created real institutional innovation, which is consistent with Ruggie's (1992) description of institutional spillovers. The Pakistan-China relationship has become stronger

in all the three areas of energy, infrastructure and security as described in the concept of interdependence by Liberials (Keohane & Nye, 1977).

The model has its shortcomings as well. In decades since 2015, Pakistan has in each decade had an import-export imbalance of 8:1 (total value of imports rising from USD 12.4 billion to USD 22.4 billion by 2025) compared to 1:8 (total value of exports rising from USD 2.5 billion to USD 2.9 billion) which indicates more dependence on imports than exports (Keohane & Nye, 1977). The direction of investment in the already developed areas and reported 287 incidences of security in Balochistan now raises a question against the liberal premise of economic integration and equity (Rosecrance, 1986). A better way to understand the structural nature of a development model is by dependency theory (Frank, 1966) where the Chinese state-owned enterprises (SOEs) operate projects with Chinese equipment and Chinese labour, and pay back the investment with long-term payments to Chinese banks. Shah's (2022) political economy approach which situates CPEC in the interstices of military and commercial establishment in Pakistan, and Chinese state capitalism, is the most analytically rich explanation of the opaque nature of CPEC governance.

More broadly in the field of International Relations, the CPEC demonstrates that the dynamics of development through infrastructure projects between unequal actors do not necessarily produce Liberal outcomes: mutual benefit, institutional accountability and peaceful interdependence. The governance system of the corridor looks more like something dependency theorist would have predicted; the disparity in terms of economic engagements, which will ensure China's trade and strategic interests will be served, and the real sub-optimal development benefits for Pakistan. Its true potential and the missed opportunities in its distribution, finances and governance will be the key to the success of the next 10 years.

CONCLUSION

China-Pakistan Economic Corridor (CPEC) at the 10th anniversary is neither the game-changer it was billed as at its launch nor the debt trap its critics said it was. An ambitious, contentious and consequential development project that has led to significant improvements in the infrastructure endowment, energy supply and institutional frameworks of Pakistan over the past decade, but has also created an unsustainable fiscal burden, uneven regional development, governance gaps and local tensions that preclude its long term development potential. The ten-year history of CPEC is telling: It is working best in areas where Pakistan's institutional capacity is strongest, and weakest—and it is precisely where Pakistan needs it most—in Balochistan, at the ML-1 railway standoff, and in the lack of transparency over whose governance that allows it to be evaluated independently for its costs and benefits.

The Liberal Internationalist model is essentially a reflection of something important: that there are common interests and interdependence that have been generated through sustained economic cooperation. What it misses out on, however, is just as significant: the unequal nature of the economic relationship, the redistributive impacts of infrastructure-led development in the absence of enabling governance, and the political economy of opacity that has shielded corridor management from scrutiny that its strategic importance calls for. Success or failure of the second decade will depend not so much on Chinese financing capacity but on the quality of Pakistani governance, transparency of institutions and the political desire to bring the strategic logic of the corridor to fruition in terms of community welfare, and particularly that of communities most directly affected by the corridor's costs.

POLICY RECOMMENDATIONS

Immediate measures to take:

1. Use Circular Debt Resolution to renegotiate the contractual terms for capacity payment with all Independent Power Producers (IPPs) that are associated with CPEC; 2) public contracts for CPEC financing; 3) establish an independent CPEC Fiscal Review Board reporting to Parliament. In absence of any solution to the nearly PKR 3.0 Trillion circular debt, fiscal space for corridor development in the second decade will be significantly limited.

2. ML-1 Railway with Phased Approach: Break up the entire ML-1 project in phases and discuss the Karachi – Lahore part as a standalone Phase 1 with new cost and financing terms. A decade of failed comprehensive negotiations needs to be superseded by pragmatic and partial negotiations that achieve tangible logistics benefits.

3. Balochistan CPEC Development Fund: Setting up of a dedicated fund, whose capital will be sourced from at least 15 per cent of the annual income of the Gwadar port, with clear-cut representation of Baloch community on its board. This mechanism would help to channel the strategic revenues received in Gwadar to the welfare of the province in the most direct institutionalised method.

4. Governance Transparency: Ensure complete transparency of all CPEC project agreements – within 90 days of the signing of the agreement; create a publicly accessible CPEC Project Tracker portal in real-time; provide a formal parliamentary committee oversight of all decisions of the JCC involving Pakistan's fiscal commitments.

5. Energy Transition: Shift energy investments in CPEC Phase II from Coal to Solar, Wind and Small Hydro, and ensure that the second decade of the CPEC is in sync with Pakistan's NDCs under the Paris Agreement, as China leads the world in renewable energy technology.

6. SEZ Activation: Supply government subsidy for off-site infrastructure for Dhabeji and Bostan SEZ's; institute binding local employment quotas of at least 40% to guarantee that the SEZ industrial development brings direct welfare benefits to the level of the community in the host regions.

7. Digital and Agricultural Cooperation: Make CPEC 2.0 digital corridor and agricultural cooperation programmes high impact, low capital intensive, welfare intensive interventions; focus on Balochistan and Khyber Pakhtunkhwa.

ACADEMIC RECOMMENDATIONS

1. Future research should use primary data techniques that can give qualitative depth to how CPEC is managed and what its impact is in the community, which cannot be achieved by secondary data analysis, including structured interviews with stakeholders of CPEC such as officials of the CPEC Authority, provincial planning commissioners, Chinese SOE project managers and community representatives.

2. There is a need to monitor the performance indicators of SEZs as they develop as CPEC priority areas up to 2025–2030, so that for the first time there can be a rigorous empirical examination of

whether the industrial cooperation framework can achieve the value-added industrialisation and technology transfer envisioned in design documents.

3. Comparative research which compares Pakistan's CPEC with other Chinese infrastructure projects such as Standard Gauge Railway (SGR) in Kenya and Hambantota Port in Sri Lanka in relation to similar investment periods would make a significant contribution to the theoretical understanding of the conditions under which Chinese infrastructure financing can generate inclusive development outcomes.

4. The most important missing link in the study of the macroeconomic impact of CPEC on Pakistan would be a complete fiscal sustainability analysis of the corridor's debt picture, which would depend on disclosure of the terms of the financing – if public – that is still outstanding.

REFERENCES

Afzal, S., & Naseem, A. (2018). China–Pakistan Economic Corridor (CPEC): Challenges and prospects. Pakistan Administrative Review, 2(1), 209–222.

Aggarwal, A. (2010). Economic impacts of SEZs: Theoretical approaches and analysis of newly notified SEZs in India. MPRA Paper No. 20902.

Ahmad, V., & Ghulam, S. (2021). Trade facilitation for economic corridors in South Asia: The perspective of Pakistan. Munich Personal RePec Archive.

AidData. (2021). Banking on the Belt and Road: Insights from a new global dataset of 13,427 Chinese development projects. AidData Research and Evaluation Office.

Ali, Y., Rasheed, Z., Muhammad, N., & Yousaf, S. (2020). Energy optimization in the context of China–Pakistan Economic Corridor. Energy Policy, 144, 111641. https://doi.org/10.1016/j.enpol.2020.111641

Asian Development Bank, World Bank, DFID, & JICA. (2018). The web of transport corridors in South Asia. Asian Development Bank.

Board of Investment Pakistan. (2024). Special Economic Zones under CPEC: Investment progress report. Government of Pakistan.

CPEC Authority. (2023). Annual report 2022–23. Ministry of Planning, Development and Special Initiatives, Government of Pakistan.

Farole, T. (2011). Special economic zones in Africa: Comparing performance and learning from global experience. World Bank Publications.

Frank, A. G. (1966). The development of underdevelopment. Monthly Review, 18(4), 17–31.

Government of Pakistan & PRC. (2024). Joint statement on deepening strategic cooperation under CPEC. Government of Pakistan.

Helleiner, E. (1994). States and the reemergence of global finance. Cornell University Press.

Human Rights Watch. (2023). Pakistan: CPEC development projects and rights concerns in Gwadar. HRW.

Husain, I. (2020). CPEC and Pakistan's macroeconomic framework. Pakistan Development Review, 59(1), 1–22.

Hussain, E. (2017). China–Pakistan Economic Corridor: Will it sustain itself? Strategic Studies, 37(4), 1–18.

IMF. (2024). Pakistan: 2024 Article IV consultation. International Monetary Fund.

IMF. (2025). World economic outlook: April 2025. International Monetary Fund.

Javid, H. (2019). CPEC in Balochistan: Development, security and political economy. South Asian Studies, 34(1), 1–20.

Keohane, R. O., & Nye, J. S. (1977). Power and interdependence: World politics in transition. Little, Brown.

Kessides, I. N. (2012). The impacts of electricity sector reforms in developing countries. The Electricity Journal, 25(6), 79–88. https://doi.org/10.1016/j.tej.2012.07.005

Ministry of Energy. (2023). Circular debt flow and resolution plan. Government of Pakistan.

National Electric Power Regulatory Authority. (2014). State of industry report 2014. Government of Pakistan.

National Electric Power Regulatory Authority. (2023). State of industry report 2023. Government of Pakistan.

Pakistan Bureau of Statistics. (2024). Pakistan Economic Survey 2023–24. Government of Pakistan.

Pakistan Social and Living Standards Measurement Survey. (2020). PSLM 2019–20 national household survey. Pakistan Bureau of Statistics.

Rehman, A. U., Hakim, A., Khan, K., & Khan, I. U. (2018). Role of CPEC in development of trade, transport and economy of Pakistan. Romanian Journal of Transport Infrastructure, 7(1), 92–100.

Rosecrance, R. (1986). The rise of the trading state: Commerce and conquest in the modern world. Basic Books.

Ruggie, J. G. (1992). Multilateralism: The anatomy of an institution. International Organization, 46(3), 561–598. https://doi.org/10.1017/S0020818300001582

Shah, A. (2022). Martial capitalism: CPEC, the military, and political economy in Pakistan. Modern Asian Studies, 56(4), 1127–1162. https://doi.org/10.1017/S0026749X20000359

Small, A. (2015). The China–Pakistan axis: Asia's new geopolitics. Oxford University Press.

South Asia Terrorism Portal. (2023). Pakistan security report 2023. SATP.

Transparency International. (2023). Corruption perceptions index 2023. Transparency International.

Ul-Haq, J., Zia, U., Kakar, S. N., & Khan, A. (2021). Smart grid potential and implementation challenges in Pakistan under CPEC. Energy Reports, 7, 2395–2406. https://doi.org/10.1016/j.egyr.2021.04.019

Wallerstein, I. (1974). The modern world-system I. Academic Press.

World Bank. (2024). World development indicators: Pakistan. The World Bank Group.

Zeng, D. Z. (2015). Global experiences with special economic zones. World Bank Policy Research Working Paper No. 7240.