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Beyond Infrastructure: Institutional Connectivity as a Framework for the Next Phase of China–Pakistan Cooperation

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Abstract

Infrastructure investment has become central to contemporary development partnerships, yet their long-term success depends increasingly on the institutions that sustain them. As the China–Pakistan Economic Corridor (CPEC) enters a more mature phase, the central policy challenge is no longer expanding physical connectivity but ensuring that infrastructure is supported by effective governance, digital capability, and human capital development. Although existing scholarship has explored each of these themes, they are typically examined as separate policy domains, offering limited insight into how they interact to shape sustained institutional advancement.

To address this gap, the article develops the concept of Institutional Connectivity as a public policy framework for understanding that transition. Based on a qualitative policy analysis of academic literature and policy documents, it conceptualises governance modernization, digital transformation, and human capital development as three interdependent dimensions of sustainable bilateral cooperation. It argues that infrastructure creates opportunities, but institutions determine whether those opportunities translate into lasting economic, social, and developmental outcomes.

By shifting attention from physical connectivity to institutional capability, the article offers a new conceptual perspective on the future of China–Pakistan cooperation. While developed in the context of CPEC, Institutional Connectivity also provides a broader analytical lens for understanding how infrastructure-led partnerships can strengthen institutional resilience alongside economic transformation.

Keywords: Institutional Connectivity; China–Pakistan Economic Corridor (CPEC); Public Policy; Governance Modernization; Digital Transformation; Human Capital Development; Belt and Road Initiative (BRI).

Introduction

For more than seven decades, China and Pakistan have maintained one of Asia's most enduring strategic partnerships. Since establishing diplomatic relations in 1951, bilateral cooperation has expanded from political and diplomatic engagement to encompass defence, trade, infrastructure, technology, education, and regional development.[1] The launch of the China–Pakistan Economic Corridor (CPEC) in 2015 marked a turning point by positioning Pakistan as the flagship partner of China's Belt and Road Initiative (BRI).[2]Through investments in transport infrastructure, energy generation, industrial development, and regional connectivity, CPEC has significantly broadened bilateral cooperation while strengthening its economic dimension.

As China–Pakistan cooperation enters a new phase, its priorities are also evolving. Alongside infrastructure development, greater attention is being directed towards governance, technological change, institutional capacity, and workforce capability. These emerging priorities require analytical approaches that move beyond conventional assessments of physical connectivity and economic integration.[3]

The existing scholarship has largely examined China–Pakistan relations through the lenses of geopolitics, security, economic integration, and CPEC. Although more recent studies have explored governance reform, digital transformation, and human capital development, these themes are generally examined as separate policy domains. Less attention has been paid to how they interact within a broader public policy perspective on the future of bilateral cooperation.

[1] Andrew Small, *The China-Pakistan Axis: Asia's New Geopolitics* (London: Hurst & Company, 2015).
[2] Government of Pakistan, Ministry of Planning, Development and Reform, *Long Term Plan for China–Pakistan Economic Corridor (2017–2030)* (Islamabad: Government of Pakistan, 2017).
[3] World Bank, *Pakistan Development Update* (Washington, DC: World Bank, latest relevant edition); United Nations, *United Nations E-Government Survey 2024: Accelerating Digital Transformation for Sustainable Development* (New York: United Nations, 2024).

This paper addresses that gap by proposing the Institutional Connectivity Model, which conceptualises governance modernization, digital transformation, and human capital development as three interdependent dimensions of China–Pakistan cooperation. Rather than treating these themes in isolation, the model offers an integrated approach for analysing how complementary policy interventions can reinforce the sustainability of bilateral cooperation.

The study pursues three objectives. First, it reviews the evolution of China–Pakistan cooperation and the role of CPEC in reshaping bilateral relations. Second, it examines the policy challenges emerging in the next phase of cooperation. Third, it develops the Institutional Connectivity Model as a conceptual lens for linking governance modernization, digital transformation, and human capital development.

The remainder of the paper is organised as follows. The next section reviews the relevant literature, followed by the methodology. The discussion develops the Institutional Connectivity Model and examines its three strategic dimensions before concluding with a policy roadmap for strengthening the continuity of China–Pakistan cooperation.

Literature Review

Scholarship on China–Pakistan relations has evolved alongside the changing nature of bilateral cooperation. Early studies approached the relationship through strategic, geopolitical, and security perspectives, emphasising the alliance's role in regional stability, South Asian geopolitics, and China's broader foreign policy objectives.[4] The launch of the China–Pakistan Economic Corridor (CPEC) in 2015 broadened this research agenda across infrastructure development, regional connectivity, trade, and economic integration, reflecting CPEC's central position within China's Belt and Road Initiative (BRI).[5]

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[4] John W. Garver, *China's Quest: The History of the Foreign Relations of the People's Republic of China* (New York: Oxford University Press, 2016)

[5] Peter Cai, *Understanding China's Belt and Road Initiative* (Sydney: Lowy Institute, 2017); David Brewster, "Silk Roads and Strings of Pearls: The Strategic Geography of China's New Pathways in the Indian Ocean," *Geopolitics* 22, no. 2 (2017): 269–291.

As the literature expanded, two broad schools of thought emerged. One presents CPEC as a catalyst for economic growth, highlighting its potential to improve infrastructure, energy security, industrialisation, and regional integration.[6] The other adopts a more critical perspective, arguing that infrastructure-led investment alone cannot guarantee inclusive development without effective institutions, regulatory coherence, and sound governance.[7] This debate reflects a wider body of development literature in which institutions are viewed as central to strategic economic performance. North argues that institutions shape the incentives governing political and economic interaction, while Rodrik, Subramanian, and Trebbi contend that institutional quality exerts a greater influence on development outcomes than geography or trade integration alone.[8]

Recent scholarship has further broadened the discussion beyond physical infrastructure to consider governance reform, digital transformation, and institutional capacity. This shift echoes a wider trend in public policy scholarship, which recognises that complex development challenges require integrated policy approaches spanning multiple sectors and institutions. Howlett and Mukherjee argue that effective policy design depends upon coordinating complementary policy instruments rather than addressing individual problems in isolation.[9] At the same time, the human capital literature emphasises that adaptive development depends not only on physical infrastructure but also on investment in education, skills, innovation, and institutional learning. Becker's theory of human capital and subsequent development research

[6] Siegfried O. Wolf, *The China–Pakistan Economic Corridor of the Belt and Road Initiative: Concept, Context and Assessment* (Cham: Springer, 2020); Shahrukh Rafi Khan and others, *China–Pakistan Economic Corridor: A Game Changer?* (Islamabad: Pakistan Institute of Development Economics, 2016).

[7] Jonathan E. Hillman, *The Emperor's New Road: China and the Project of the Century* (New Haven: Yale University Press, 2020); Nadège Rolland, *China's Eurasian Century? Political and Strategic Implications of the Belt and Road Initiative* (Seattle: National Bureau of Asian Research, 2017).

[8] Douglass C. North, *Institutions, Institutional Change and Economic Performance* (Cambridge: Cambridge University Press, 1990); Dani Rodrik, Arvind Subramanian, and Francesco Trebbi, "Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development," *Journal of Economic Growth* 9, no. 2 (2004): 131–165.

[9] Michael Howlett and Ishani Mukherjee, "The Contribution of Comparative Policy Analysis to Policy Design: Articulating Principles of Effectiveness and Clarifying Design Spaces," *Journal of Comparative Policy Analysis: Research and Practice* 20, no. 1 (2018): 72–87.

underscore the importance of building workforce capabilities alongside technological and physical assets.[10]

Despite these advances, the literature remains fragmented. Governance modernization, digital transformation, and human capital development are generally examined as distinct policy domains rather than as interdependent dimensions of China–Pakistan cooperation. As a result, while scholarship has moved beyond an exclusive focus on infrastructure, it still lacks an integrated public policy perspective for understanding how these dimensions collectively shape the next phase of bilateral cooperation.

Research Design

This study adopts a qualitative policy analysis grounded in a conceptual and interpretive research design to examine the future trajectory of China–Pakistan cooperation beyond infrastructure-led development. Rather than evaluating individual CPEC projects or testing causal relationships, it synthesises existing scholarship and policy evidence to develop an analytical lens for understanding the next phase of bilateral cooperation.

The analysis draws on peer-reviewed literature, government policy documents, and reports published between 2015 and 2026, while incorporating earlier foundational works where necessary to provide historical and theoretical context. Sources were selected for their relevance to China–Pakistan relations, CPEC, governance modernization, digital transformation, and human capital development. They include publications from the Government of Pakistan, the World Bank, the Asian Development Bank, the United Nations, and leading academic journals.

[10] Gary S. Becker, *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, 3rd ed. (Chicago: University of Chicago Press, 1993); Theodore W. Schultz, *Investment in Human Capital: The Role of Education and of Research* (New York: Free Press, 1971); World Bank, *Pakistan Human Capital Review: Building Capabilities Throughout Life* (Washington, DC: World Bank, 2023).

The material was analysed using thematic analysis to identify recurring concepts, policy priorities, and emerging trends across the literature. These themes were then synthesised into broader analytical categories, providing the basis for the framework developed in this study.[11] As a conceptual policy study, this research is intended to advance theoretical understanding rather than evaluate programme performance. Its purpose is to integrate existing knowledge into a coherent analytical lens that can inform future policy debates and provide a foundation for subsequent empirical research, including comparative case studies and quantitative assessments of institutional strengthening within China–Pakistan cooperation.

Beyond Infrastructure: Towards Institutional Connectivity

Why Infrastructure Alone Is No Longer Sufficient

The first phase of the China–Pakistan Economic Corridor (CPEC) reshaped bilateral cooperation through major investments in transport infrastructure, energy, logistics, and industrial development, strengthening Pakistan's connectivity under China's Belt and Road Initiative (BRI).[12] These investments established the physical foundation for economic integration, but infrastructure alone cannot ensure resilient growth.

Development research consistently shows that the benefits of physical investment depend on effective governance, capable public institutions, and coherent regulatory systems. The *World Development Report 2017* argues that institutions determine whether infrastructure translates into lasting economic and social gains.[13] This perspective is increasingly reflected in CPEC scholarship, which has shifted beyond infrastructure to examine governance, digital transformation, and institutional capacity as emerging determinants of the corridor's future.

[11] Virginia Braun and Victoria Clarke, *Thematic Analysis: A Practical Guide* (London: SAGE Publications, 2022).
[12] Government of Pakistan, Ministry of Planning, Development and Reform, *Long Term Plan for China-Pakistan Economic Corridor (2017–2030)* (Islamabad: Ministry of Planning, Development and Reform, 2017).
[13] World Bank, *World Development Report 2017: Governance and the Law* (Washington, DC: World Bank, 2017).

This shift suggests that the next phase of China–Pakistan cooperation should be understood not simply as an expansion of physical connectivity, but as a transition towards stronger institutional connectivity. Rather than treating governance modernization, digital transformation, and human capital development as separate policy priorities, they should be viewed as mutually reinforcing dimensions that enable infrastructure investments to generate economic, social, and institutional outcomes. The following section develops this conceptual structure.

Institutional Connectivity: A Framework for the Next Phase of China–Pakistan Cooperation

The concept of Institutional Connectivity builds on this transition by shifting attention from physical infrastructure to the institutions that govern, manage, and sustain it. While infrastructure creates opportunities for development, its enduring value depends on the quality of governance, the capacity of public institutions, and the people responsible for implementing change.

Institutional Connectivity refers to the institutional alignment that links governance modernization, digital transformation, and human capital development so that infrastructure investments can be translated into enduring economic, social, and developmental outcomes.

Institutional Connectivity is conceptually distinct from related ideas such as institutional capacity, governance, or policy coordination.[14] Institutional capacity generally refers to the ability of public institutions to perform their functions effectively, while governance focuses on the processes and structures through which authority is exercised and public decisions are implemented. Similarly, policy integration emphasises coordination across policy sectors or government agencies. Institutional Connectivity does not replace these concepts; rather, it

[14] Francis Fukuyama, *Political Order and Political Decay* (New York: Farrar, Straus and Giroux, 2014); Michael Howlett, *Designing Public Policies: Principles and Instruments* (London: Routledge, 2019).

provides a broader analytical perspective by examining how governance modernization, digital transformation, and human capital development interact to create the institutional conditions through which infrastructure investments generate enduring development outcomes. In this sense, the concept is concerned not only with the strength of individual institutions, but with the relationships and complementarities that enable them to function collectively in support of long-term cooperation.

This perspective broadens the conventional understanding of connectivity. Infrastructure connectivity focuses on physical assets, transport networks, and economic corridors, whereas Institutional Connectivity emphasises the institutional conditions that allow those investments to generate sustainable economic and social benefits. The two are not competing concepts; they are complementary dimensions of broad-based development.

Applied to China–Pakistan cooperation, this architecture argues that the next phase of CPEC should be evaluated not only by the infrastructure it delivers but also by the institutional capabilities it strengthens. Three interdependent dimensions underpin this approach:

- **Governance Modernization** – strengthening institutional effectiveness, policy coordination, and implementation capacity
- **Digital Transformation** – enhancing public service delivery, innovation, and administrative efficiency through digital technologies
- **Human Capital Development** – investing in education, skills, and institutional learning to maximise the lasting returns of infrastructure investment

Together, these dimensions provide a public policy model for understanding how China–Pakistan cooperation can evolve from infrastructure-led connectivity towards institutional strengthening.

Strategic Dimension I: Governance Modernization

Governance modernization forms the first strategic dimension of the Institutional Connectivity Model because institutions determine whether infrastructure investment translates into adaptive development. Roads, energy projects, and industrial zones may create new opportunities, but their impact depends on the quality of the institutions responsible for designing policy, coordinating implementation, and responding to changing economic conditions. Development scholars have consistently argued that strong institutions underpin economic performance by providing the rules, incentives, and administrative capacity necessary for sustained growth.[15]

This relationship has become relevant to the evolution of the China–Pakistan Economic Corridor (CPEC). As cooperation matures, attention is gradually shifting from the delivery of infrastructure to the institutional arrangements needed to sustain it. The CPEC Long-Term Plan identifies governance reform, policy coordination, and institutional capacity as essential to the corridor's continuing success, while subsequent scholarship similarly argues that administrative effectiveness and policy continuity will shape the future trajectory of bilateral cooperation.

Governance modernization therefore extends beyond improving bureaucratic efficiency. It encompasses regulatory quality, policy coherence, inter-agency coordination, transparency, and the capacity of public institutions to respond to complex economic and technological challenges[16]. From a public policy perspective, these functions are most effective when they are coordinated rather than pursued through isolated reforms, allowing institutions to support broader developmental objectives.

Within the Institutional Connectivity Model, governance provides the institutional foundation upon which the remaining strategic dimensions are built. Digital technologies can

[15] Douglass C. North, *Institutions, Institutional Change and Economic Performance* (Cambridge: Cambridge University Press, 1990); Daron Acemoglu and James A. Robinson, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty* (New York: Crown Publishers, 2012).
[16] Michael Howlett, *Designing Public Policies: Principles and Instruments* (London: Routledge, 2019); Organisation for Economic Co-operation and Development (OECD), *Recommendation of the Council on Public Governance* (Paris: OECD, 2024).

improve public administration only where institutions possess the capacity to implement and regulate them effectively, while investments in education and skills generate lasting returns only when supported by stable governance and coherent public policy. Governance modernization is therefore best understood not as an end in itself, but as the enabling condition that allows institutional reform, technological change, and human capital development to reinforce one another.

Strategic Dimension II: Digital Transformation

Digital technologies are gradually reshaping how governments deliver public services, coordinate institutions, and support economic development. As international cooperation expands beyond physical infrastructure, digital capabilities have become an essential component of competitiveness, governance, and cross-border connectivity.[17] Within the Institutional Connectivity Model, digital transformation is therefore understood as a strategic enabler of institutional effectiveness rather than simply the adoption of new technologies.

This shift is reflected in China's Belt and Road Initiative through the Digital Silk Road, which extends cooperation beyond transport and energy to encompass digital infrastructure, telecommunications, e-commerce, artificial intelligence, and smart technologies.[18]2 In the context of China–Pakistan cooperation, recent studies suggest that digitalisation can strengthen e-governance, improve project management, and enhance institutional coordination under CPEC.

Pakistan's digital transformation, however, continues to face significant challenges, including uneven digital infrastructure, limited institutional capacity, gaps in digital literacy, and fragmented public service delivery.[19]Addressing these constraints requires more than

[17] Tomasz Janowski, "Digital Government Evolution: From Transformation to Contextualization," *Government Information Quarterly* 32, no. 3 (2015): 221–236.
[18] Hong Shen, "Building a Digital Silk Road? Situating the Internet in China's Belt and Road Initiative," *International Journal of Communication* 12 (2018): 2683–2701.
[19] United Nations, *United Nations E-Government Survey 2024: Accelerating Digital Transformation for Sustainable Development* (New York: United Nations, 2024).

technological investment alone. Effective digital transformation depends on supportive institutions, coherent regulatory structures, and sustained investment in administrative capacity. China–Pakistan cooperation can contribute to this process through knowledge exchange, digital public administration, collaborative research, and innovation partnerships linking government, universities, and industry.

Within the proposed framework, digital transformation reinforces governance modernization by improving policy implementation, administrative coordination, and evidence-based decision-making. Alongside this shift, digital systems depend upon a workforce capable of developing, managing, and adapting new technologies. This interdependence naturally leads to the third strategic dimension of the Institutional Connectivity Model: Human Capital Development.

Strategic Dimension III: Human Capital Development

People ultimately determine whether institutions function effectively and whether technological change translates into adaptive development. Infrastructure and digital systems can create new opportunities, but their value depends on a workforce equipped with the knowledge, skills, and institutional capacity to manage, adapt, and innovate. Human capital therefore represents the third strategic dimension of the Institutional Connectivity Model.[20]

Contemporary development research recognises human capital as a critical driver of productivity, innovation, and economic competitiveness. For Pakistan, this dimension is particularly significant given its young population and growing demand for skilled labour.[21] Human capital therefore connects infrastructure investment with durable productivity and national competitiveness.

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[20] Gary S. Becker, *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, 3rd ed. (Chicago: University of Chicago Press, 1993).
[21] World Bank, *Pakistan Human Capital Review: Building Capabilities Throughout Life* (Washington, DC: World Bank, 2023); United Nations Development Programme, *Human Development Report 2023/2024* (New York: UNDP, 2024).

Within China–Pakistan cooperation, the focus should therefore extend beyond scholarships and academic exchanges towards enduring knowledge partnerships. Greater collaboration among universities, research institutions, public agencies, and industry can strengthen technical expertise, policy capacity, and innovation ecosystems. Such partnerships are likely to become increasingly important as CPEC expands into areas such as digital technologies, renewable energy, advanced manufacturing, and other knowledge-intensive sectors.

Within the Institutional Connectivity Model, human capital functions as the enabling dimension that allows governance modernization and digital transformation to generate lasting impact. Effective institutions depend on capable professionals to implement reforms, while digital systems require a workforce able to develop, manage, and continuously improve them. Human capital therefore completes the model by linking institutional capacity with lasting economic transformation.

Interdependence of the Strategic Dimensions

The value of the Institutional Connectivity Model lies not in its individual components but in the relationships between them. Governance modernization, digital transformation, and human capital development should therefore be understood as mutually reinforcing dimensions of a single public policy model rather than as independent policy priorities. Progress in one area strengthens the effectiveness of the others, creating an integrated system through which infrastructure investments can generate meaningful economic, institutional, and social outcomes.

This interdependence has important implications for China–Pakistan cooperation. Investments in digital infrastructure are unlikely to achieve their full potential without institutions capable of regulating and implementing technological change or a workforce equipped to manage new systems. Similarly, governance reforms are less effective without digital tools that improve administrative capacity and evidence-based decision-making, while advances in education and skills require institutional environments that enable knowledge to be translated into innovation and productivity. Sustainable development therefore depends on pursuing governance modernization, digital transformation, and human capital development as complementary rather than sequential priorities.

Viewed in this way, Institutional Connectivity shifts the focus of China–Pakistan cooperation from the delivery of individual projects to the development of institutional capabilities. Its emphasis is not simply on building infrastructure, digitising public services, or expanding educational opportunities in isolation, but on ensuring that these investments reinforce one another through coordinated public policy. By linking institutions, technology, and people within a single analytical perspective, the model provides a more comprehensive approach to understanding the sustainability and resilience of bilateral cooperation.

Operationalising Institutional Connectivity: A Policy Roadmap

The Institutional Connectivity Model is intended not only as an analytical approach but also as a guide for public policy. Translating its three strategic dimensions into practice requires a phased approach that strengthens governance modernization, digital transformation, and human capital development in a coordinated manner. Rather than treating these priorities as separate reform agendas, the roadmap presented below illustrates how they can reinforce one another throughout the next phase of China–Pakistan cooperation[22].

Short-Term Priorities (2026–2028): Strengthening Institutional Foundations

The immediate priority should be strengthening the institutional foundations necessary for effective policy implementation. This includes improving inter-agency coordination,

[22] Michael Howlett, *Designing Public Policies: Principles and Instruments* (London: Routledge, 2019); Organisation for Economic Co-operation and Development (OECD), *Recommendation of the Council on Public Governance* (Paris: OECD, 2024).

enhancing regulatory coherence, and establishing structured mechanisms for policy dialogue between Chinese and Pakistani institutions. Parallel investment in digital public infrastructure, data governance, and civil service capability can improve implementation capacity while creating the institutional conditions required for more advanced forms of cooperation.

Medium-Term Priorities (2028–2032): Building Collaborative Innovation Ecosystems

As institutional capacity develops, cooperation can gradually expand from implementation towards innovation. Partnerships linking governments, universities, research institutions, and industry can facilitate technology transfer, applied research, and workforce development while strengthening innovation ecosystems in areas such as renewable energy, digital governance, advanced manufacturing, agriculture, and climate resilience. At this stage, knowledge creation should become an important complement to infrastructure development rather than a separate policy objective.

Long-Term Priorities (2032 Onwards): Institutionalising Strategic Cooperation

Over the longer term, governance modernization, digital transformation, and human capital development should become enduring features of China–Pakistan cooperation rather than initiatives linked to individual projects. Institutional Connectivity can provide the policy architecture for expanding collaboration into emerging areas such as artificial intelligence, digital trade, public health, higher education, and innovation policy, allowing bilateral cooperation to remain responsive to evolving economic and technological priorities.

Ultimately, the effectiveness of future China–Pakistan cooperation should be assessed not only by the infrastructure it delivers but also by the institutional capabilities it develops. Indicators such as governance quality, digital maturity, innovation capacity, and human capital development offer a more comprehensive basis for evaluating the partnership's future trajectory. Viewed through this lens, Institutional Connectivity represents the evolution of

China–Pakistan cooperation from infrastructure-led investment towards institutional development.

Table 1. Phased Operationalisation of the Institutional Connectivity Model

Strategic Dimension	**2026–2028 (Institutional Foundations)**	**2028–2032 (Collaborative Capacity)**	**2032 Onwards (Strategic Institutionalisation)**
Governance Modernization	Strengthen policy coordination, regulatory coherence, and implementation capacity	Enhance inter-agency collaboration and evidence-based policymaking	Institutionalise governance reforms through permanent coordination mechanisms
Digital Transformation	Expand digital public infrastructure and data governance	Promote digital innovation, technology transfer, and smart public administration	Advance cooperation in AI, digital trade, and emerging technologies
Human Capital Development	Invest in civil service capability, technical training, and digital skills	Strengthen university–industry partnerships and applied research	Build long-term knowledge ecosystems and innovation capacity

Conclusion

The evolution of China–Pakistan cooperation offers an opportunity to rethink how the success of bilateral partnerships is understood. While the first phase of the China–Pakistan Economic Corridor (CPEC) focused on expanding physical connectivity, the next phase will depend progressively on the institutional capabilities needed to sustain, adapt, and maximise those investments over time.

This article has argued that Institutional Connectivity provides a useful way of understanding this transition. By bringing together governance modernization, digital transformation, and human capital development within a single public policy perspective, it suggests that the developmental value of infrastructure lies not only in the assets it creates but also in the institutions and people that enable those assets to generate lasting economic and social outcomes.

The principal contribution of this study lies in moving beyond predominantly infrastructure-centred analyses of China–Pakistan cooperation. Rather than examining governance, digital transformation, and human capital as separate policy domains, it integrates them into a single conceptual model for understanding the next phase of bilateral cooperation. Institutional Connectivity is proposed as an analytical framework rather than an empirically validated model. Its applicability across different political and institutional contexts remains subject to future empirical testing.

As a conceptual study, this paper is intended to advance theoretical understanding rather than provide empirical evaluation. Future research could examine the applicability of the Institutional Connectivity Model through comparative case studies, policy evaluations, or quantitative analysis of governance, digital transformation, and human capital outcomes across Belt and Road initiatives.

Ultimately, the future of China–Pakistan cooperation will be shaped not only by the infrastructure it builds but also by the institutions it develops. Physical connectivity can create opportunities for growth, yet it is effective governance, technological capability, and human capital that determine whether those opportunities translate into enduring development. Viewed from this perspective, Institutional Connectivity is more than a framework for China–Pakistan cooperation; it offers a broader way of thinking about how infrastructure-led partnerships can build institutional resilience.

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