BRD MONIT R The Muse-Mandalay Railway project

MYANMAR

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Sandhi Governance Institute is a Myanmar Policy Research Institute with the focus on enhancing capacity of political parties and civil society organizations, increasing transparency and accountability in public sector and strengthening participation of all key stakeholders in public affairs and major investments to promote democratic governance in Myanmar.

Introduction

The Muse-Mandalay Railway project is a proposed 431-kilometer-long standard-gauge railway project situated across the China-Myanmar border with an estimated total cost of USD \$9 billion.¹ The railway, which is planned to connect Kunming, the capital of China's southern Yunnan province, to Mandalay in central Myanmar, represents a major part of the China-Myanmar Economic Corridor (CMEC), a cooperation framework for China's Belt and Road Initiative (BRI). Additional lines from Mandalay would also connect to the Kyaukphyu Special Economic Zone (KP SEZ) and the proposed New Yangon City project, two other key sites of China-Myanmar infrastructure projects, and the railway would further support these projects by connecting them to industrial areas in Yunnan.

The railway was initially greenlit with the signing of a memorandum of understanding (MOU) in 2011 between China and Myanmar during the administration of former President UThein Sein, but the expiration of the MOU and opposition from the local community brought the project to a halt in 2014. The project then recommenced in 2018 with a new MOU signed for a feasibility study. As of 2021, the Muse-Mandalay Railway project remains in the planning stages.

This railway project represents a change in Chinese investment priorities in Myanmar. During the previous period of military rule in Myanmar from 1988 to 2010, China-financed infrastructure projects in Myanmar focused on energy projects such as the Myanmar-China Oil and Gas Pipelines project. Under the CMEC framework, investment priorities for China and Chinese state-owned enterprises (SOEs) shifted to mega-infrastructure projects such as the Muse-Mandalay railway and the deepwater port in the KP SEZ. The CMEC projects promote a more robust China-Myanmar trade relationship and improve connectivity between China's land-locked Yunnan province and the Indian Ocean, offering shipping routes for goods and energy resources that bypass the Malacca Strait.

However, the Muse-Mandalay Railway project has raised concerns of several possible negative effects in Myanmar. The proposed railway would run through conflict-afflicted Northeast Myanmar, threatening to exacerbate issues experienced by ethnic minorities in the region such as internal displacement and land confiscation. Furthermore, the financing structure of the project has raised fears that Myanmar could fall into a Chinese "debt-trap." Leaders from both China and Myanmar, such as Foreign Minister Wang Yi and former Myanmar State Counsellor Daw Aung San Suu Kyi, have publicly stated that the CMEC will follow Myanmar's national development plan, and many of its projects will be financed as public-private partnerships (PPP), but authorities have not properly addressed several governance gaps and issues related to the project.

^{1.} Nan Lwin, "China-Backed Muse-Mandalay Railway to Cost \$9 Billion," *The Irrawaddy*, May 14, 2019, https://www.irrawaddy.com/ news/burma/china-backed-muse-mandalay-railway-cost-9-billion.html

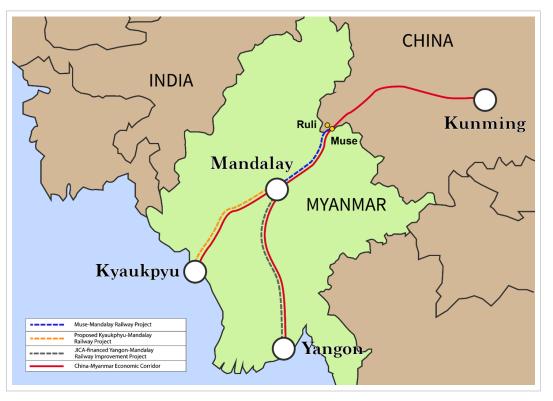


Figure I: China-Myanmar Economic Corridor and Proposed Rail Projects

Source: BRI Monitor

Project Background and SOE Governance

Project Timeline and Bilateral Negotiations

Official action on the Muse-Mandalay Railway project began with the signing of the initial MOU between China and Myanmar in 2011 during President UThein Sein's administration. China Railway Eryuan Engineering Group Company Limited (CREEC) submitted two feasibility studies on the Muse-Mandalay and Mandalay-Kyaukphyu Railway projects to the Myanmar government in 2011 and 2012, according to CREEC deputy chief engineer Zheng Kenju's presentation at China-Myanmar Think Tank Forum in Kunming in 2018.² Work on the Muse-Mandalay railway was suspended in 2014 due to strong objection from local people.³

However, this project was revived during the National League of Democracy (NLD) government's term. The NLD government maintained a good relationship with China's government despite strong public sentiments against Chinese investments and moved to endorse the Belt and Road Initiative (BRI). Former State Counselor Daw Aung San Suu Kyi attended the BRI Forum in 2017 and 2019 and President Xi Jinping visited Myanmar in January 2020. Infrastructure development was named as a key part of the NLD government's twelve-point economic policy announced in 2016, with a preference for the PPP model as a means to meet the country's massive infrastructure investment needs.⁴This push for infrastructure investment

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² Zeng Kejun, China Railway Eryuan Engineering Group Company Limited's Presentation, China-MyanmarThinkTank Forum, Kunming, Yunnan, China, 2018.

^{3.} Ibid.

⁴ Aye Thidar Kyaw and Clare Hammond, ''Government Reveals 12-Point Economic Policy,'' *Myanmar Tim*es, July 29, 2016, https://www. mmtimes.com/business/21664-nld-12-point-economic-policy-announcement.html

Muse-Mandalay Railway Project - Timeline

2011

April - 1 1st MoU for Muse-Kyaukphu Rail Transportation System in Nay Pyi Taw May - 1 Supplementary MoU in Beijing



2012

April - 1 Feasibility Study Report for Muse-Kyaukphu Rail Transportation System submitted

April - 27 Ist MoU for Muse-Kyaukphyu Railway expired. July - 18 Ist MoU for Muse-Kyaukphyu Railway extended



2014

2013

April - 27 Extension of 1st MoU for Muse-Kyaukphyu expired again December - 1 2nd Addendum to MoU

Project halted due to strong opposition from local community

HALT

2018

October - 22 MoU to conduct new feasibility study for Muse-Mandalay railway signed



2019

April - 1 Completed feasibility study handed over to Myanmar government



2020

June Swiss company stepped in as third party to review the feasibility study



2021

January Muse-Mandalay-Kyaukphyu feasibility study was conducted.



by the NLD government, combined with strong ties to Beijing due to China's role in the peace process, national reconciliation, border security, and economic development, led to the development of the CMEC framework under the NLD. For the Muse-Mandalay project specifically, the Chinese side highlighted its potential to increase connectivity between Myanmar and the rest of Asia. They promoted the railway as part of the Trans Asia Railway, an integrated transport platform initiated by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), as Myanmar is located in the TAR's western corridor. In addition, CREEC officials emphasized the economic benefits that the railway could bring, including a two to three percent growth in Myanmar's GDP.⁵

As a result of this renewed interest in China-funded infrastructure projects, a MOU to establish CMEC was signed on September 9, 2018 in Beijing by Minister of Planning and Finance U Soe Win and Chairman of National Development & Reform Commission (NDRC) He Lifeng, representing China's top economic policy planning agency.⁶ Subsequently, an agreement to conduct a new feasibility study was signed between CREEC and Myanmar Railway (MR), a Myanmar government SOE, on October 22, 2018.⁷ According to General Manager of Planning and Administration of MR U Htaung Shan, CREEC undertook the ground survey for the project at its own cost.⁸ The completed feasibility study was submitted to the Myanmar government at the second BRI forum in April 2019, and the project was slated for implementation under the CMEC cooperation framework for 2019 to 2030.⁹

Since the initiation of CMEC, a key question has been whether the projects under its umbrella follow Myanmar's national development plan. Daw Aung San Suu Kyi, who also acted as the chairwoman of Myanmar's BRI Steering Committee, stated at the 2017 BRI Forum that BRI projects would be in accordance with Myanmar's national development plan and that they must be national priorities linked to its Myanmar Sustainable Development Plan (2018-30).¹⁰ In addition, each project must pass through a competitive tender process, and financing will be multilateralized. Chinese Foreign Minister Wang Yi also stated that CMEC projects will be in accordance with the national development plan and practical conditions.¹¹ However, although this project is not included in the Myanmar government's project bank, which is a pipeline of priority projects, it was included in the list of priority PPP projects that was showcased in Naypyitaw by the Ministry of Planning and Finance in January 2019.¹² The Union Minister of Transport and Communication of NLD government also reaffirmed that it is a national priority project will be implemented under CMEC as a bilateral cooperation PPP project or if it must pass through an open tender process.

^{5.} Zeng, "China Railway Eryuan Engineering Group Company Limited's Presentation at China-Myanmar Think Tank Forum."

⁶ Nan Lwin, "Gov't Signs MoU with Beijing to Build China-Myanmar Economic Corridor," *Irrawaddy,* September 13, 2018, https:// www.irrawaddy.com/news/burma/govt-signs-mou-beijing-build-china-myanmar-economic-corridor.html

^{7.} "China, Myanmar Sign MoU on Feasibility Study of Muse-Mandalay Railway," *Xinhua*, October 23, 2018, http://www.xinhuanet.com/ english/2018-10/23/c_137550972.htm

^{8.} Chan Mya Htwe, "Survey Starts for Major Railway Project," *Myanmar Times*, February 1, 2019, https://web.archive.org/ web/20210210005419/https://www.mmtimes.com/news/survey-starts-major-railway-project.html
^{9.} Lwin, "China-Backed Muse-Mandalay Railway to Cost \$9 Billion."

^{10.} Su Phyo Win and Chan Mya Ktwe, "State Counsellor Stresses Belt and Road Needs to Align National Priorities," *Myanmar Times*, August 28, 2017, https://www.mmtimes.com/news/state-counsellor-stresses-belt-and-road-needs-align-national-priorities.html

^{11.} "China Proposes Building China-Myanmar Economic Corridor to Boost Cooperation," *Xinhua*, November 20, 2017, https://en.imsilkroad.com/p/70187.html

Myanmar Project Bank, "Project List," accessed April 12, 2020, https://projectbank.gov.mm/en/activity-list/#activity-list-header
 Lwin, "China-Backed Muse-Mandalay Railway to Cost \$9 Billion."

Under current circumstances, the State Administration Council (SAC), the military junta that staged a coup on February 1, 2021, is likely to approve the construction phase without regard to the commercial, financial, environmental, and social risks, largely due to the political legitimacy and diplomatic protection the Chinese government can provide it at the international forum. For example, the SAC has removed the public consultation clause from the BRI Working Committee's guidelines, allegedly to facilitate faster implementation of BRI projects.¹⁴ These moves have increased the risks of CMEC projects in Myanmar, meaning CREEC and the Chinese government must review preliminary assumptions about this project.

Key Entities

Myanmar Railway

Myanmar Railway (MR), a Myanmar government state-owned enterprise (SOE) under the control of the Ministry of Transport and Communications, worked with Chinese SOE CREEC on the feasibility study for the Muse-Mandalay project as part of the MOU signed in 2018. At a press conference in June 2020, the Managing Director of Myanmar Railway told the media that it was evaluating the project carefully in order not to cause harm to the country and that the project would not be implanted if the project had a negative impact on Myanmar.¹⁵ The Ministry of Transport and Communications is both a regulator and implementing agency (through MR), creating a conflict of interest. The Ministry tends to focus on spending allocated public expenditures rather than rationalizing its services and ensuring commercial and financial viability.¹⁶ It is one of the oldest institutions in Myanmar, having been founded during the colonial period.

However, due to mismanagement and corruption of successive military governments from 1962 to 2010, MR has become a loss-making SOE and a burden on the public finance. It is not corporatized and is in danger of dissolving, as its share of passengers and freights has deteriorated rapidly. According to a 2016 report by the Asian Development Bank (ADB) on Myanmar's transport sector and railways, MR had a 44 percent share of passenger market and 14 percent share of freight market in 1995, but those shares were reduced to 10 percent and 1.5 percent by 2015, respectively, driven primarily by slower speeds in comparison to road transit.¹⁷

There are many issues MR needs to address, including revenue shortfalls against operational costs (MR revenues only cover half of its operational costs), misguided investment priorities, financial restructuring, governance reform and setting up regulatory institution, and commercialization of MR.The ADB recommends a phased approach to reform process and current international donors, mainly Japan International Cooperation Agency (JICA), have provided loans and grants for upgrading main rail corridors and Yangon Circular Railway. In the project bank, a pipeline of priority projects that are in accordance with the NLD's Myanmar Sustainable Development Plan (MSDP)'s goals, including the main rail corridors Yangon-Mandalay, Yangon-Pyay, Mandalay-Myitkyina, Yangon-Mawlamyaing and Yangon Circular Railway upgrading projects, are being implemented by ODA assistance.The continuity of these donor-funded projects is in doubt after the February coup as most donors have suspended their ODA projects.

^{14.} "Myanmar Junta Implementing China's BRI Projects by Stealth," *Irrawaddy*, July 23, 2021, https://www.irrawaddy.com/opinion/ analysis/myanmar-junta-implementing-chinas-bri-projects-by-stealth.html

^{15.} Nan Lwin, "Myanmar, China to Conduct Feasibility Study on Mandalay-Kyaukphyu Rail Link," *Irrawaddy*, January 11, 2021, https:// www.irrawaddy.com/news/burma/myanmar-china-conduct-feasibility-study-mandalay-kyaukphyu-rail-link.html

^{16.} "Myanmar Transport Sector Policy Note," Asian Development Bank, 2016, https://www.adb.org/sites/default/files/publication/184794/ mya-transport-policy-note-es.pdf

^{17.} "Myanmar's Transport Sector Policy Note: Railways."

China Railway Eryuan Engineering Group Company Limited (CREEC)

China Railway Eryuan Engineering Group Company Limited is a subsidiary of China Railway Group Limited, an SOE under China's State Council.¹⁸ According to its company profile, CREEC is the "largest multi-industry and comprehensive engineering survey & design corporation in China."

Project Financing

The financing structure of Muse-Mandalay appears to be undetermined, but it is most likely a joint venture between two government SOEs, set up through a special purpose vehicle (SPV) to be implemented under PPP model, specifically a Build-Operate-Transfer (BOT) model, under which CREEC would pay for construction and operate the rail for a set period of time before returning to MR. The initial 2011 MOU called for a BOT, according to Chinese language sources.¹⁹ In 2019, BRI project analyst U Ye Tun argued that the BOT "would be advisable" given Myanmar's financial situation, but General Manager of Administration and Planning for Myanmar Railways U Htaung Shan Khan stated that the project structure was still unknown.²⁰ The project structure still appears to be undetermined: a January 2021 presentation by the Myanma Railways on rail development activities in Myanmar includes the financing arrangements for other rail projects in the country but does not list the financing arrangement for Muse-Mandalay.²¹

Project Feasibility

None of the three feasibility studies conducted for this project appear to be available, making it difficult to judge the true costs and benefits of the project. According to a September 2018 study on railways in the Greater Mekong subregion conducted by the ADB with financing from China's Regional Cooperation and Poverty Reduction Fund and including broad consultation of both Chinese and Myanmar government stakeholders, a feasibility study was not available and public consultation had not been conducted.²² Furthermore, all feasibility studies appear to have been conducted by CREEC, the same entity that would implement the studies project, creating a conflict of interest that throws the reliability of these studies into doubt.²³ In June 2020, Myanma Railway (MR) announced they had been receiving technical assistance from an unnamed Swiss consulting firm to assess the feasibility study, including project cost.²⁴ The results of this assessment and the original feasibility study do not appear to be publicly available.

Studies by international donors suggest that while upgrades to Myanmar's railway could aid in economic development, the long-term sustainability of Myanmar's rail system is contingent upon ongoing funding for maintenance. According to the Japan International Cooperation Agency (JICA), development in the north, including through increased connectivity, would reduce poverty in the country by 25 percent. According

 ^{18.} "About Us," China Railway Group Limited, accessed December 16, 2021, http://www.crecg.com/english/2687/39952/index.html
 ^{19.} "The Seamless Connection of China-Myanmar Railway is Underway! The Feasibility Study of the Muse-Mandalay Railway Will Begin!," Sohu, October 23, 2018, https://www.sohu.com/a/270869283_729676

^{20.} Chan Mya Htwe, "Survey Starts for Major Railway Project,"; Syed Rashid Ali, "Technical Report for New Myanmar Line Submitted," *Rail Journal*, May 31, 2019 https://www.railjournal.com/regions/asia/technical-report-for-new-myanmar-line-submitted/

^{21.} Ba Myint, "Rail Sector Development Activities in Myanmar," Greater Mekong 24th Subregional Transport Forum, January 2021, https://greatermekong.org/sites/default/files/Appendix%2017%20MyanmaRailways.pdf

^{22.} "Connecting the Railways of the Greater Mekong Subregion," ADB Technical Assistance Consultant, September 2018, https://www. adb.org/sites/default/files/project-documents/42518/42518-024-tacr-en.pdf

^{23.} Zeng, China Railway Eryuan Engineering Group Company Limited's Presentation; Chan, "Survey Starts for Major Railway Project"
^{24.} Nan Lwin, "Myanmar Pulls Swiss Firm to Scrutinize China's BRI Project," *Irrawaddy*, June 11, 2020, https://www.irrawaddy.com/ news/burma/myanmar-pulls-swiss-firm-scrutinize-chinas-bri-project.html

to business owners and other stakeholders surveyed, lack of infrastructure was one of the key barriers to starting a business in Mandalay (the endpoint of the railway), suggesting that the railway could boost growth.²⁵ However, a 2020 OECD report found that MR's emphasis on extending the network, including in areas that did not justify maintaining rail services, came at the cost of maintenance, resulting in a "deterioration of the service offer, notably against alternative transport modalities." Overall, trains operate at half their potential speed, and in the case of the Yangon-Mandalay line, rail is nearly twice as slow as travel by bus.²⁶

Governance Gaps & Other Project Issues

Though the Muse-Mandalay Railway project was initiated by CREEC in 2011, it remains in an early phase of the project cycle. This delay could be attributed to the governance deficits and lack of proper project planning and implementation plan during President Thein Sein's administration and the previous period of military rule. According to JICA-DICA's summary of an analytical paper on Financing Infrastructure Development and Public-Private Partnership (PPP) Framework for Myanmar, implementing government agencies (IGAs) have limited capacity with respect to the systematic use of PPP for infrastructure development.²⁷ On the factors of strategic investment plans, financial risk management, institutional capacity and line ministries' current practices, Myanmar ranked poorly and needed significant work in capacity building.

Similarly, the ADB's report on Restructuring the State's Role in Business Enterprise and Service Delivery in Myanmar: The Role of PPPs and an Indicative Action Plan, pointed out several "unknowns" that challenge governments in producing successful PPP projects. These unknowns include:

- Not knowing what is a "good deal" in the PPP context
- Not knowing what is "market price" for goods
- Not knowing what is possible to ask from private sector
- Not knowing what they will demand from government

Compounding this weak regulatory and institutional capacity is the history of Chinese investments in the extractive sector, most of which are viewed as one-sided and exploitative with huge negative impacts on communities and the environment. Furthermore, as seen in the case of the Myitsone Dam, these projects have often been used for political gains and international legitimacy when the ruling government faced social protests.

In addition, Myanmar Railways (MR), the SOE that signed the 2018 MOU, lacks the capacity to properly govern this project. MR's financial viability, institutional capacity, technical expertise, and regulatory environment are not favorable to implementing mega infrastructure PPP projects such as the Muse-Mandalay Railway. As mentioned above, MR relies on Union Ministry of Transport's budget, rather than being a viable commercial entity. Aware of these challenges, the NLD government during its tenure sought assistance from donors and

^{25.} "Mandalay Investment Opportunity Survey Report," Myanmar Investment Commission and Japan International Cooperation Agency, October 2015, https://www.dica.gov.mm/sites/default/files/news-files/en_mandalay_investment_opportunities_survey_final_report_160217_mic_jica_mmrd.pdf

^{26.} OECD Investment Policy Reviews: Myanmar 2020,'' OECD, 2020, https://www.dica.gov.mm/sites/default/files/news-files/d7984f44-en.pdf

^{27.} "Financing Infrastructure Development and Public-Private Partnership Framework for Myanmar," JICA and DICA, March 20, 2016, https://dica.gov.mm/en/news/public-private-partnership-ppp-framework

third-party consulting firms to scrutinize feasibility studies submitted by Chinese SOEs. However, it remains unclear how the military junta, also known as the State Administration Council (SAC), will move forward on extant BRI projects. The SAC is sending signals to China's government that it is more capable and willing to implement BRI projects faster than the NLD government for the sake of political expediency and official political recognition by China.

The planned route of the Muse-Mandalay Railway also raises several significant risks. China previously dropped the Bangladesh-China-India-Myanmar Economic Corridor (BCIM) from its official list of BRI corridors. Though China did not announce an official reason for its removal, researchers Hangioo Hahm and Selim Raihan calculated that the BCIM and the New Eurasia Land Bridge, another BRI corridor, possess high economic, social and environmental costs as well as low returns.²⁸ They highlighted that the BCIM passed through areas populated by ethnic minorities with ongoing conflicts and instability, including in opium cultivation areas that contribute to the large narcotics trade in Asia, which the Muse-Mandalay Railway would run through. Since the military coup, there has been an increase in drug trafficking activity in these areas coinciding with the increased conflict and deterioration of security and governance.²⁸ The military junta, or its border guard forces, and with the increased armed presence, tensions between the military junta and ethnic armed groups and ethnic populations will likely increase.³⁰ With that in mind, this project should be postponed until it is possible to conduct proper consultation with affected communities and undertake a transparent land acquisition process.

Recommendations

Given current escalation of armed conflicts not only in ethnic armed organizations (EAOs)-controlled areas, but also in Burman mainland of Sagaing, Magway, between self-defense local forces (or) People's Defense Force (PDF) and Myanmar army which are on main CMEC corridor and other regions, Chinese government should reconsider its BRI policy in Myanmar.

Political turmoil and instability have engendered heightened anti-Chinese sentiments in Myanmar, and if China's government decides to go ahead with BRI/CMEC projects in cooperation with SAC, public backlash could be more severe and have a huge impact on the long-term China-Myanmar relationship. Therefore, it is in mutual interest of China and Myanmar to at least postpone this Muse-Mandalay Railway project amid uncertainty and wait for the emergence of a legitimate democratic government in Myanmar.

^{28.} Hongjoo Hahm and Selim Raihan, "The Belt and Road Initiative: Maximizing Benefits, Managing Risks—A Computable General Equilibrium Approach," *Journal of Infrastructure Policy 2,* no. 1 (2018), https://systems.enpress-publisher.com/index.php/jipd/article/ view/140

^{29.} Gavin Butler, "Myanmar's Coup Has Opened the Floodgates of the Southeast Asian Drug Trade," Vice News, December 19, 2021 https://www.vice.com/en/article/m7vgm3/myanmar-coup-golden-triangle-drug-trade-asia

^{30.} "Selling the Silk Road Spirit: China's Belt and Road Initiative in Myanmar," *The Transnational Institute,* November 2019 https://www.tni.org/en/selling-the-silk-road-spirit

Conclusion

The NLD government has attempted to address these issues and strengthen the regulatory framework for the systematic implementation of much-needed infrastructure projects (both CMEC and non-CMEC) by issuing project bank notification 2/2018, which set up the PPP Center in Naypyitaw and created the online Project Bank web portal to combine all the national priority projects implemented through public financing, ODA assistance, and private financing. It also tried to be more transparent and comply with national laws for safeguarding communities and the environment.

After the February military coup, all hopes for major infrastructure projects were dashed due to the escalation of armed conflicts, the military's crimes against humanity, a worsening economic crisis in conjunction with banking and currency crises, the collapse of health system, and the third wave of Covid-19. It seems complete state collapse is imminent, and the SAC has neither the legitimacy nor capacity to govern the country. Widespread deterioration in the rule of law will impede implementation of these mega-infrastructure projects, particularly due to heightened security risks for Chinese workers. Risks are rising, and, as a result, the previous risk assessments need to be reviewed and projects should be suspended until a legitimate government with popular mandate comes into existence. The Chinese government, for CMEC and its national interests, should support the will of the people.



BRI Monitor is a collaborative effort by five civil society organizations in Southeast Asia and the Pacific: the Institute for Democracy and Economic Affairs (IDEAS) of Malaysia, Stratbase Albert Del Rosario Institute (ADRi) of the Philippines, Sandhi Governance Institute (SGI) of Myanmar, the Institute of National Affairs (INA) of Papua New Guinea and the Future Forum of Cambodia to promote transparency and accountability in major infrastructure projects funded through the Belt and Road Initiative (BRI) in the region.

These organizations have studied the regulatory environments governing these large infrastructure projects in respective countries, including public procurement, official development assistance, public private partnership (PPP), and more, to identify regulatory gaps. They have each researched a set of case studies to identify implementation gaps and governance gaps. Each case study assesses the level of transparency based on almost 40 data points, from basic project information to the tendering process to project completion. Last but not least, each organization maps out the structure of the projects in question in order to identify domestic and international entities involved in the project and to understand the degree of public financial exposure resulting from each project.

This website is intended to be a platform for the publication of our research outputs and as a knowledge repository. We also hope that the website can be used as a platform for knowledge sharing and a tool to advocate better governance of major infrastructure projects in the region.

BRI Monitor is supported by the Center for International Private Enterprise (CIPE).