Assessing the Belt and Road Initiative in Southeast Asia amid the COVID-19 Pandemic (2021-2022)

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Cambodia’s Prime Minister Hun Sen (front right) gestures as Chinese Foreign Minister Wang Yi (front left) looks on as they attend a handover ceremony of the Morodok Techo National Stadium, funded by China’s grant aid under its Belt and Road Initiative, in Phnom Penh on 12 September 2021. Photo: TANG CHHIN Sothy/POOL/AFP.

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EXECUTIVE SUMMARY

• The year 2021 marked the 30th anniversary of ASEAN-China Dialogue Relations and the elevation of ASEAN-China ties to Comprehensive Strategic Partnership. Economic ties between China and ASEAN have grown stronger despite continuous disruptions by the COVID-19 pandemic and growing tensions in the South China Sea.

• Data analysis from an original dataset tracking major China-financed projects under the Belt and Road Initiative (BRI) in Southeast Asia since January 2021 shows that China remains committed to boosting BRI projects’ progress.

• Overall, the pandemic has accelerated China’s pivot towards “soft” infrastructure such as health services and digital economy as a priority in its economic engagement with the region. This is evident in the increasing prominence of the Health Silk Road (HSR) and Digital Silk Road (DSR) in China’s BRI agenda. These trends are likely to continue in the long run.

• Despite the progress of BRI projects in Southeast Asia since January 2021, China still faces a bumpy road ahead. Negative effects posed by the ongoing pandemic will continue to impact the implementation of BRI projects, especially with the recent surge of COVID-19 cases in China.

• Besides, local concerns about social and environmental costs will likely influence the prospects of BRI projects in the region.
INTRODUCTION

The year 2021 marked the 30\textsuperscript{th} anniversary of ASEAN-China Dialogue Relations and the elevation of ASEAN-China ties to Comprehensive Strategic Partnership. Economic ties between China and ASEAN have grown stronger despite continuous disruptions by the COVID-19 pandemic and growing tensions in the South China Sea. According to China’s Ministry of Foreign Affairs, China-ASEAN bilateral trade reached US$789.53 billion and increased by 29.8 per cent in the first 11 months of 2021.\textsuperscript{1} China has remained ASEAN’s largest trading partner since 2009; at the same time, ASEAN has been China’s top trading partner since 2020.\textsuperscript{2} China’s rising economic impacts in Southeast Asia are reflected in the State of Southeast Asia 2022 Survey Report: over 76 per cent of respondents recognise that China is the most influential economic power in Southeast Asia, although 64.4 per cent of them are worried about China’s economic influence.\textsuperscript{3}

As China’s flagship foreign policy, the Belt and Road Initiative (BRI) serves as a major channel through which China has been engaging with ASEAN since its inception in 2013. The COVID-19 pandemic has posed significant challenges to BRI projects worldwide—due to travel restrictions and social distancing measures, about 20 per cent of BRI projects were “seriously affected” as of June 2020, with another 30-40 per cent being “somewhat affected.”\textsuperscript{4} Southeast Asia rose to become the top BRI investment destination in 2020, despite a steep decline in China’s overall BRI investments worldwide.\textsuperscript{5} As its economy gradually recovered in 2021,\textsuperscript{6} China stepped up its efforts to accelerate the progress of BRI projects globally. By the end of 2021, China’s non-financial investments in 57 BRI countries reached US$20.3 billion, with a year-on-year growth rate of 14.1 per cent. Among ten major recipient countries, seven are from Southeast Asia, namely Singapore, Indonesia, Malaysia, Vietnam, Laos, Thailand, and Cambodia, alongside Bangladesh, the Emirates and Kazakhstan.\textsuperscript{7}

Given the BRI’s substantial engagement in Southeast Asia during the pandemic, it is necessary to assess the progress of BRI projects in the region. Analysing data from an original dataset tracking major China-financed BRI projects in Southeast Asia since January 2021, this study finds that China remains committed to boosting BRI projects’ progress amid the pandemic. Overall, the pandemic has accelerated China’s pivot towards “soft” infrastructure such as health services and the digital economy as new priorities in its economic engagement with the region. Nevertheless, two key challenges stemming from the ongoing pandemic and local concerns about social and environmental costs are likely to hinder the progress of BRI projects in the region.

DATA ANALYSIS

This study employs data from an original dataset recording major BRI projects in Southeast Asia between January 2021 and March 2022. In general, China’s involvement in foreign projects comprises two parts: 1) investments in the form of financial and technological
support and 2) construction contracts financed by local or other foreign sources. Due to the lack of an authoritative definition of what constitutes a BRI project, and to avoid labelling all China-involved projects under the banner of the BRI, this study adopts a narrower definition of BRI projects, which only considers projects meeting the following two criteria as related to the BRI: 1) they must be reported on the official website of the BRI—the Belt and Road Portal run by the Chinese government or undertaken by Chinese companies listed on the website; and 2) they have to be invested in by Chinese sources, indicating China’s position as a key stakeholder. To be more specific, BRI projects recorded in the dataset take four forms: 1) projects financed by loans provided by Chinese financial institutions, either wholly or partially; 2) projects invested in by Chinese companies; 3) projects invested in by joint ventures between Chinese companies and their local partners; and 4) projects as part of China’s foreign assistance programme.

To ensure that the dataset captures BRI projects in Southeast Asia to the best extent possible, this study consulted three sources. The primary source of the dataset is the weekly/bi-weekly reports of BRI projects posted on the Belt and Road Portal. The second source is the websites of Chinese companies undertaking BRI projects which also include certain projects not listed on the Belt and Road Portal. The third source is media reports from platforms including Xinhua, The Strait Times, The Khmer Times, The Phnom Penh Post, The Jakarta Post, The Laotian Times, Reuters, which provide additional details regarding the projects listed in the dataset. It bears mentioning that the dataset is not an exhaustive list of all China-financed BRI projects in Southeast Asia since January 2021 and includes only verifiable sources. Due to the lack of data on project costs, this study mainly analyses three dimensions: project status, project sector, and major players.

Adopting a broader definition of BRI projects—one that includes projects financed by non-Chinese sources, the Belt and Road Portal has reported around 833 China-involved projects worldwide between January 2021 and March 2022, of which roughly 29 per cent take place in Southeast Asian countries. However, according to the narrower definition of BRI projects as mentioned above, the dataset in this study records 95 BRI projects invested in by China in Southeast Asia that have remained active since January 2021. Standing at various stages of development, these projects belong to 87 master projects. These figures signify China’s commitment to BRI projects in the region even during the pandemic.

**PROJECT STATUS**

Figure 1 below shows the status of major BRI projects in Southeast Asia that have remained active since January 2021. Chinese companies have won 18 bids of such projects in Southeast Asia since January 2021. Major projects in this category include the Lanxang Culture Park Project in Laos and Xinhai Industrial Park Combined Cycle Power Plant Design Project in Indonesia. Chinese companies have also signed 18 contracts with their local partners, covering projects such as the Upper Stung Tatay Hydropower BOT Investment Project in Cambodia and Golden Jubilee Seaview City Project in the Philippines. Among the 13 projects that started construction are the Huaqing Aluminum
Industry Aluminum-Power Integration Project in Indonesia\textsuperscript{16} and Thatbyinnyu Phaya Repair Project in Myanmar.\textsuperscript{17} At least 22 projects are underway—including mega projects such as the Jakarta-Bandung High-Speed Railway in Indonesia\textsuperscript{18} and the MRL East Coast Rail Link in Malaysia.\textsuperscript{19} In addition, 24 projects have been completed since January 2021. The completed project that grabbed the most media attention is the China-Laos Railway, a signature BRI project inaugurated on 3 December 2021. The US$6 billion project—costing almost one-third of Laos’ GDP—cuts travel time from Vientiane to the Chinese border by four hours.\textsuperscript{20}

Figure 2 depicts country-level variations in the distribution of BRI projects in Southeast Asia since January 2021. Among Southeast Asian countries, Indonesia has hosted 40 projects, ranking top on the list. These projects span multiple sectors, including energy, transportation, construction, chemicals, metals, among others. Cambodia and Laos both have hosted over ten projects. In terms of project status, Chinese companies have won the most bids (13), signed the most contracts (9), and completed the most projects (7) in Indonesia.
PROJECT SECTOR

Figure 3 shows the distribution of BRI projects in Southeast Asia by sector and its national variations since January 2021. Most projects are clustered into five sectors: energy (29%), transportation (23%), metals (18%), construction (8%), and chemicals (6%). The data also show China’s efforts to diversify BRI projects in Southeast Asia by expanding its investment in health services, telecommunication, and education. Also, national variations are apparent: 75 per cent of energy projects are hosted by Indonesia, Laos, and Cambodia; 64 per cent of transportation projects are distributed in Indonesia and Cambodia; and 82 per cent of metals projects are located in Indonesia.

Figure 4 illustrates the distribution of specific types of energy projects at both regional and national levels. Power stations utilising clean energies—including hydropower, solar power and biomass—account for roughly 46 per cent of all energy projects listed in the dataset, indicating ASEAN’s growing need for green energy and China’s expanding role in the renewable energy industry in the region. Nevertheless, the data also demonstrate that China continues to invest in traditional energy sectors, accounting for 39 per cent of all energy projects in Southeast Asia since 2021. In particular, six coal-fired power plants—hosted mainly by Indonesia—are still at initial stages since January 2021, contradicting the China Belt and Road Initiative (BRI) Report 2021’s key finding that “China did not engage in investments or construction projects related to coal in 2021”. Furthermore, there exist national variations in the distribution of energy projects: while most power stations utilising hydropower are located in Cambodia and Laos, power stations fuelled by coal are mostly clustered in Indonesia.
Figure 5 shows the top ten Chinese companies undertaking BRI projects in Southeast Asia since January 2021. Power Construction Corporation of China has undertaken the most projects (12), followed by China State Construction Engineering Corporation Ltd (10), China Energy Engineering Corporation (10), China Communications Construction Company Ltd (10), and China China Metallurgical Group Corporation (9). Figure 6 indicates types of parent companies listed in the dataset—76 per cent of Chinese companies undertaking China-financed BRI projects in Southeast Asia are state-owned enterprises (SOE) and 24 per cent are private companies.

**MAJOR PLAYERS**

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NEW TRENDS

While traditional sectors constitute the majority of BRI projects in Southeast Asia since January 2021, the dataset also reveals some emerging trends that shed light on the BRI’s trajectory in the region. Overall, the pandemic has accelerated China’s pivot towards “soft” infrastructure such as health services and digital economy as new priorities in its economic engagement with the region, as is evident in the increasing prominence of the Health Silk Road (HSR) and Digital Silk Road (DSR) in China’s BRI agenda. These trends are likely to continue in the long run.

Health Silk Road

According to the China Belt and Road Initiative (BRI) Report 2021, China’s global engagement with BRI projects in the health sector surged from US$130 million in 2020 to US$450 million in 2021. This trend is manifested in the progress of BRI projects in Southeast Asia since January 2021. For instance, on 28 December 2021, a China-assisted
medical building at the Cambodia-China Friendship Preah Kossamak Hospital in Phnom Penh passed completion inspection. The facility is funded by the Chinese government’s grant aid and is equipped with modern medical technology.26

Also, on 16 December 2021, Huawei Technologies (Thailand) Co., Ltd, the Office of the National Broadcasting and Telecommunications Commission (NBTC), and Siriraj Hospital co-launched the “Siriraj World Class 5G Smart Hospital”—the first and largest 5G smart hospital in Southeast Asia.27 Utilising Huawei’s technologies of 5G network, cloud services, and artificial intelligence, the hospital aims to provide more efficient and accessible health services—especially for those living in rural areas.

These projects are but a few examples of China’s endeavour to participate in the regional health governance via the HSR—a dimension of the BRI that has gained momentum in China’s foreign policy agenda amid the pandemic. While proposed by President Xi Jinping as a joint initiative with the World Health Organization (WHO) in 2017,28 the HSR was officially associated with the BRI only after the outbreak of the COVID-19 pandemic in early 2020.29 As part of the HSR diplomacy, China has been actively distributing—and partially donating—medical supplies such as masks and vaccines to Southeast Asia to help regional states combat the pandemic.30 As of December 2021, China is said to have provided around 600 million doses of vaccines to ASEAN;31 in addition, China has pledged to donate another 150 million doses to ASEAN and US$5 million to the ASEAN COVID-19 Response Fund.32 ASEAN countries’ responses to China’s health diplomacy in the region, however, are mixed. As the State of Southeast Asia 2022 Survey Report shows, although over 57 per cent of respondents acknowledge China’s strongest vaccine support to the region, only 18.7 per cent indicate their trust in vaccines produced by Sinopharm/Sinovac,33 resulting from a combination of factors including general vaccine hesitancy, concerns about Chinese vaccines’ efficacy, and mistrust in China.34

**Digital Silk Road**

The launching of Huawei’s 5G smart hospital in Thailand signifies another trend—the digitalisation of the BRI in the region. Similarly, the notion of the DSR was put forth long before the pandemic outbreak. It first appeared in the Ministry of Industry and Information Technology (MIIT)’s official document in 2014 and was incorporated into the BRI agenda during the First Belt and Road Forum in Beijing in 2017.35 The core of the DSR is to push leading Chinese tech firms—mostly private companies such as Huawei, ZTE, Tencent, Alibaba—to gain the upper hand in the emerging global digital markets, especially against the backdrop of the intensifying U.S.-China strategic rivalry.

The COVID-19 pandemic has highlighted the crucial role of digital infrastructure in the BRI agenda in two ways. First, it bolsters China’s HSR and DSR diplomacy by providing information technologies to enable BRI countries to battle against the pandemic, such as mass contact tracing, teleconference system, 5G-powered contactless delivery, etc. Second, it allows China to transcend physical barriers aggravated by lockdowns and social distancing measures, reducing damages to BRI projects caused by the pandemic.37
As the forerunner of China’s 5G technology, Huawei has been deepening its cooperation with ASEAN in the face of severe pushback from Western countries in recent years. Since January 2021, Huawei has made significant inroads into building digital infrastructure that aims to “excel in both performance and energy efficiency” in the region. Huawei’s AI-assisted solutions and 5G technology have been applied in Thailand and Indonesia to help government hospitals combat the pandemic. Huawei also launched the Customer Solution Innovation Center (CSIC) in Malaysia to “assist the nation in becoming the ASEAN digital hub.” In Singapore, Huawei has partnered with the National University of Singapore Business Analytics Centre (NUS BAC) to “nurture talent and upskill students to help Singapore fill the talent gap in the technology sector.”

Besides Huawei, ZTE is also a major provider of 5G network services in Indonesia, Malaysia and the Philippines. It is worth noting that while private tech companies remain main drivers of the DSR in Southeast Asia, state-owned companies are key stakeholders, too. For instance, in May 2021, China Energy also signed The Philippines Common Cell Tower Contract to build 1,000 cell towers in the country.

**CONCLUSION**

Despite the progress of BRI projects in Southeast Asia since January 2021, China still faces a bumpy road ahead. Negative effects posed by the ongoing pandemic will continue to impact the implementation of BRI projects, especially with the recent surge of COVID-19 cases in China, which puts to the test China’s zero-COVID policy. Lockdown measures adopted in Shanghai and neighboring provinces have led to production suspension and shipping delays, which are likely to influence global supply chains and limit China’s ability to promptly export goods needed for the BRI projects overseas.

Besides, local concerns about the BRI’s social and environmental costs will persist. Issues such as forced relocation, compensation disputes, and influx of Chinese workers feature prominently in the media coverage of the BRI’s social impacts in the region. In Laos, many villagers displaced by construction of mega projects such as the China-Laos Railway and dams on the Mekong River have not yet received appropriate compensation as promised. The influx of unskilled Chinese workers also gives rise to tensions in Indonesia as these workers are considered to have occupied jobs reserved for local workers. The discussion about BRI’s environmental costs has largely focused on Chinese dams built on the upstream Mekong River, which are correlated to increasingly frequent droughts and loss of fish stocks and farmland in downstream countries. The extent to which these concerns are addressed will influence local perceptions as well as long-term prospects of BRI projects in the region.
ENDNOTES

1“中国-东盟合作事实与数据: 1991-2021”,中国外交部, 2021 年 12 月 31 日, 
2“突破 8000 亿！东盟保持我国第一大货物贸易伙伴”, 新华丝路，2022 年 1 月 4 日, 
Institute, 16 February 2022, https://www.iseas.edu.sg/articles-commentaries/state-of-southeast-
4 Reuters Staff, “China says one-fifth of Belt and Road projects ‘seriously affected’ by pandemic, 
silkroad-idUSKBN23Q0I1.
5 Kaho Yu, “The Belt and Road Initiative in Southeast Asia after COVID-19: China’s Energy 
and Infrastructure Investments in Myanmar”, ISEAS Perspective 2021/39, 6 April 2021, 
6 Luna Sun, “China 2021 economic growth ‘expected to exceed target’, despite headwinds” South 
China Morning Post, 1 December 2021, https://www.scmp.com/economy/china-
economy/article/3158004/china-2021-economic-growth-expected-exceed-target-despite.
7 “2021年我国对‘一带一路’沿线国家投资合作情况”, 中国商务部，2022 年 1 月 4 日, 
8 For instance, many projects contracted to Chinese companies in Singapore fit into this category.
9 See https://www.yidaiyilu.gov.cn/info/iList.jsp?cat_id=11432.
10 Given the lack of data regarding exact financing sources of certain projects, the numbers 
presented here are based on the author’s estimation.
11 This dataset only includes projects that have remained active since January 2021 and classifies 
project status into five categories—“bid awarded”, “contract signed”, “construction started”, “in 
progress”, and “completed”. Project status is based on the availability of the most up-to-date data. 
Project status is updated accordingly if there is evidence suggesting further progress. The label 
“construction started” mainly refers to projects that started after January 2021, while “in progress” 
describes projects that started before January but have not been completed yet. However, for 
projects labeled “construction started”, if there is evidence indicating substantive progress since 
the construction started, they are also treated as “in progress.” Projects are labeled “completed” if 
1) the construction is finished, 2) project is handed over to the local partner, or 3) the project is put 
into commercial use.
12 “中建四局中标老挝市政工程设计项目”, 见道，2021 年 4 月 19 日, 
13 陈语,“ 中国能建西南院中标印尼鑫海工业园区 60 万千瓦燃机联合循环电站可研、初设施 
一体化设计”, 国际电力网，2021 年 7 月 12 日, https://power.in-en.com/html/power-
2392417.shtml.
14 “CHMC Signed Cambodia Upper Stung Tatay Hydropower BOT Investment Project 
Agreements”, China National Heavy Machinery Corporation, 10 March 2021, 
15 “面积约为 22.9 万平方米！中建六局签约菲律宾海景城项目”, 见道，2022 年 1 月 12, 
16 “中化公司召开印尼华青 1×380MW 火力发电项目开工会”, 中国化学工程集团有限公司, 
17 “中国政府援助缅甸蒲甘他冰瑜佛塔修复项目正式启动”新华网，2022 年 1 月 8 日, 
See Lee 2021.


37 See Lee 2021.

