



## Future Challenges of China-Lao Railway on Lao's Economic and Social Development

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### Abstract

*This paper tends to examine the impact and challenge of the China-Lao Railway that has been operating since December 2021 on Lao's economic and social development. As a landlocked country, Lao has been facing difficulties in boosting its economic and human improvement due to the lack of infrastructure and development capacity. However, Lao is also geographically strategic because its position is in the middle of the Indo-China area. It makes Lao eagerly wants to be a land-linked country through the railway that connects China and other countries in the region. Under the project Belt and Road Initiative, Lao, for the first time, has a high-speed railway that links the capital city, Vientiane, and Boten, the China-Lao border, and further connects Kunming, the Chinese provincial capital. After one year of implementation, the positive impact has been felt by Laotians such as the tourism sectors, goods flow, and education sectors. However, land compensation and environmental issue are the negative impacts that Laotians encounter. Lao also might face some challenges to sustaining this railway's benefits namely a debt trap, transnational crime, and severe corruption.*

**Keywords:** Belt and Road Initiative, China-Lao Railway, Infrastructure Development.

### Introduction

The Lao People's Democratic Republic (Lao) is a small country in the center of the Indochina Peninsula. It is still on the list of least developed countries in the world, it is also the second poorest country in ASEAN after Myanmar. This situation happens in Lao because of some factors such as geography, topography, population, and human resources. Geographically, Lao is the only landlocked country in Southeast Asia and is surrounded by mountains (Japan International Cooperation Agency n.d.). In 2017, the Human Development Index (HDI) positions Lao at rank 139 of 189 countries. Even though Lao is rich in natural resources, due to the small domestic market with only a 6.9 million population and limited access to the outside world, Lao is still struggling to boost its economic growth (United Nations Department of Economic and Social Affairs (UNDESA) 2021).

To boost the economy and develop the country, Lao has the ambition to shift its situation from being a landlocked country to being a land-linked country. Lao's location is in the heart of the Greater Mekong Subregion (GMS), it is exactly in the middle that has a direct border with China in the north, Vietnam in the east, Thailand in the west, Myanmar in the northeast, and Cambodia in the south (Nations Online n.d.). This position is supposed to make Lao geographically strategic as Dwight Eisenhower told Kennedy during the cold war that Lao was a "cork in the bottle" of the Indo-Pacific (Greenstein and Immerman 1992). The statement is still relevant for the current situation where Lao can be very beneficial if Lao

can access the outer world and connect rising power China and link other ASEAN countries. Since 2001, Lao wants to utilize its position and being a land-linked country in Indochina as part of its development vision. The Lao government has been determined to transform Lao by promoting the perception that Lao is the land bridge that can provide direct overland transport routes between its seaboard neighbours (Kunze and Tolentino 2008). One strategy to reach the transformation was by joining the infrastructure connectivity of GMS which connects the East-West Corridor, North-South Corridor, and Southern Corridor (Nouansavanh 2010). Although this strategy has increased Lao's GDP by an annual average rate of 7%, the country remains one of the poorest in Southeast Asia and the Pacific region. The efforts to transition from a landlocked to a land-linked country by increasing investment and access to core infrastructure and services still need to be done in order to sustain economic growth and alleviate poverty (Private Infrastructure Advisory Facility (PIIAF) 2016). To be sure, engaging in transportation infrastructure development to succeed in the ambition of being a "land-linked" country is Lao's national interest.

The Lao's national interest match with what China offers under the umbrella of the Belt and Road Initiative (BRI). BRI was initiated by President Xi Jinping at the end of 2013 and implemented in 2014 which aims to strengthen connectivity among countries in Asia, Europe, Africa, and Latin America. The main points of BRI are infrastructure development and enlarged trade and investment (Voon and Xu. 2020). Lao has been actively supporting BRI because it is aligned with the 8th National Socio-Economic Development plan 2016–2020 to mobilize social and economic development, as well as particularly to graduate from the least-developed country list by 2024 and lift the country to upper-middle-income in 2030 (Khamphengvong, et al. 2022). Under BRI, Lao signs some key infrastructure projects to support its goals namely the hydropower station, the ground station, the new special economic zone in the north part of Lao, and the mega project Lao-China Railway.

Lao-China Railway is projected to be a successful strategy to enhance Lao's ambition as a land-linked country. Lao-China Railway has been finished and launched on 4 December 2021. This high-speed railway connects Lao's capital city, Vientiane to China's Yunnan province, Kunming. The railway from Vientiane to Boten is around 414 km and from Boten to Kunming is 595km. With the high-speed train, the travel time will be shorter, it will only take less than four hours to reach Boten from the capital city which is significantly less than 15 hours by car (World Bank 2020). Despite the rumours about BRI's trap, for the first time, Laotians can finally experience sitting and traveling comfortably on the high-speed railway. Therefore, it is necessary to examine the impact of the railway on Lao's economic and social development after it has been actively operating and whether the positive effects outweigh the negative. The challenge that Lao might face in boosting its development from the railway is also important to be discussed.

## **Literature Review**

The development of transportation infrastructure will influence sustainable economic growth and social enlargement. The traffic infrastructure affects both production and consumption by which railway infrastructure changes residents' consumption structures and ultimately promotes sustainable economic growth by promoting private tourism. From this research, the construction of railways brings many benefits to a country's sustainable and

healthy development (Wu, Zhang and Xu 2021). This positive optimism brought Lao to sign an agreement with China and started to build the Lao-China Railway in 2016.

Lao's main interest is shifting the condition from a landlocked to a land-linked country and graduating from the list of least developed countries and being an upper-middle income in 2030. China's offering supplies what Lao needs to reach its goal since China also wants to connect the ASEAN countries, especially the Indo-China area through Asia Pan Railway. Yu Hong assumes Lao-China Railway has the potential to be a game changer for Lao economy if the Lao government, corporate sectors, and local community work together to reap its economic benefit (Hong 2021). On the other hand, Zoltan and Somsack argue that the railway as China's interconnector is China's geopolitical strategy to tighten its presence and influence in the region. Instead of experiencing the advantage, Lao is projected to verge of indebtedness, and it might find itself fully exposed to Chinese intentions (Zoltan and Somsack 2020). However, after one year of implementation, has the railway benefited Laotians? Or is Lao starting to fall into China's trap?

During the several months of operations, Laotians seem very enthusiastic and impressed with the first high-speed railway in the country. Based on the survey of 412 respondents across Lao, it is revealed that both economic and social determinants have a positive influence on perceived benefit attitudes toward BRI. The Laotians expect education, tourism, and FDI will be improved after the BRI's projects are completed especially the high-speed train (V. Khamphengvong, et al. 2022). Moreover, in December 2021 a few days after the inauguration of the Lao-China Railway, Tom Wilms tried to analyse the impact of the railway on Lao PDR and compared the project with the planned Budapest-Belgrade railway line. It is assumed that the railway represents an important step towards bringing one of the poorest nations to speed up with its ASEAN counterparts although at the cost of greater dependence on China (Wilms 2021). Nonetheless, it was still too early to claim the impact and give the final verdict on the merits of the railway project. After one year of operation, the impact slowly can be seen, whether it is more positive or negative. Hence, this article will examine how the Lao-China railway will leverage the Laotian's life and the challenges that Lao might face from the cooperation.

## **Method**

This paper is descriptive-qualitative research in which the data is collected from scientific journals, reports, official websites, news, and other online resources. By using the concept of railway connectivity, this paper will describe the impact of the Lao-China Railway on Lao's economic and social development, both positive and negative sides. The railway is considered as the cheapest, safest, and fastest land transportation for mobilizing goods and people. The railway development will promote trade, tourism, and investment, as well as mitigate unemployment and poverty and contribute to the overall economic development of the country (KC 2017).

Furthermore, the railway can enable sustainable economic development because it will connect one city to another city. The connectivity among towns (from the core or large cities to peripheral cities) will create a polarized effect where the economy around the area will improve. First, it further enlarges the market within the core areas by largely reducing travel time and costs for producers in peripheral cities to transport their products to core cities. Second, it enhances the location endowment caused by the connectivity of



transportation. It can improve the mobility of production factors such as labour, capital, information, and technology, better connectivity, a higher level of investment, increasing specialization, and reorganization and rationalization of productions (Jiao, et al. 2020). Moreover, it distributes the accessibility in the settlements since the access of the residents from one city to another will be more accessible. It would create big opportunities for socio-economic development (Gallego, et al. 2015).

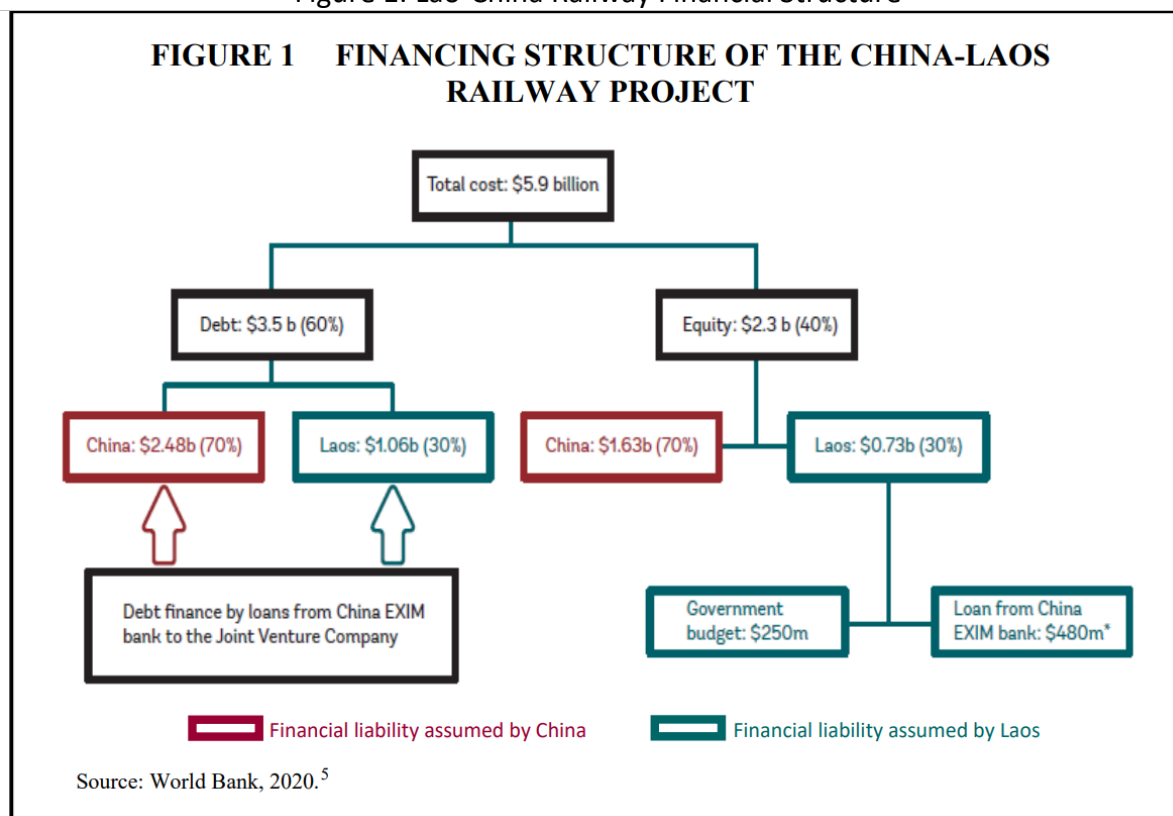
## **Result and Discussion**

### *Lao-China Railway Project under BRI's Framework*

The Lao-China railway is a mega project in Lao and a vital gate for China to make the ambition of Asia Pan Railway successful. The railway connects Vientiane to Kunming with a length of around 1009km where the time travel will be only eight hours compared to the car which takes a whole day. From the capital city Vientiane to Boten, the Lao-China border in the northern area, is around 414 km and takes less than four hours which is significantly less than fifteen hours by car (World Bank 2020). The fund is shared by Lao's government at 30% and China's Yunnan Construction and Investment Holding Group (YCIH) at 70% (Xinhua 2020). The project is started in 2016 while the other countries in the neighbourhood still negotiated with China. COVID-19 does not become a barrier to making this project finish on time on December 3<sup>rd</sup>, 2021, as calculated and making Lao the first ASEAN country who finish the silk part of BRI and has a high-speed railway (Chheang 2021). Lao also becomes the gate and the starting point of the Asia-Pan Railway.

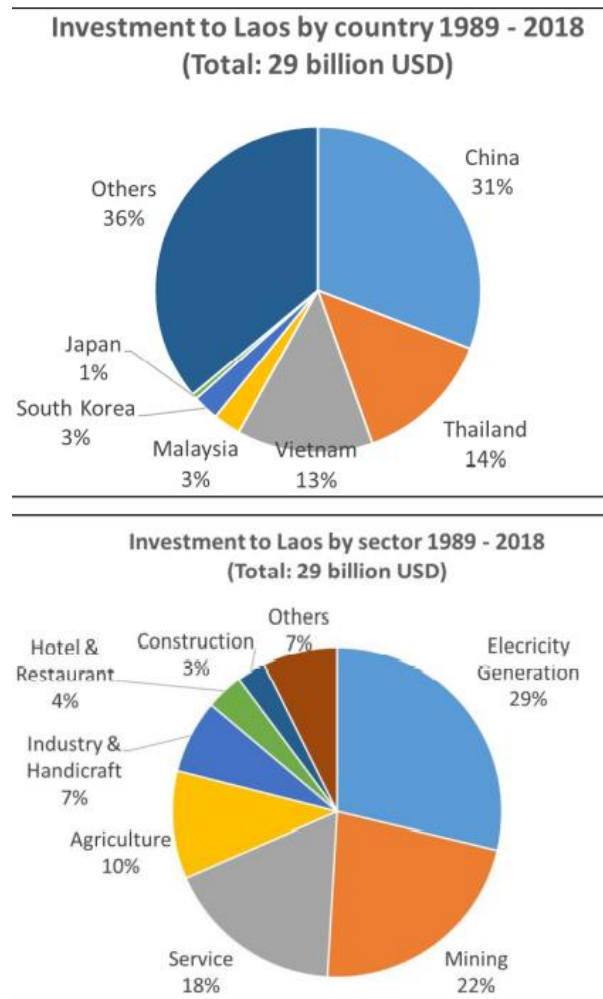
Moreover, as a docking project between the China-proposed Belt and Road Initiative, the railway project is mostly funded by China. The total investment of the railway is US\$5.9 billion. The price to connect the railway is very huge because Lao's geographical condition is full of mountainous terrain. It makes the construction also should build 167 bridges and 75 tunnels with a total length of 198 km (Chen and Dicarolo 2021). The percentage of the payment for Lao is 30% of the total investment. However, Lao only injects US\$250m from its government budget and loans the rest of the money from China EXIM Bank which can be seen clearly in figure 1. In the other words, this project is mostly funded by China's money, and Lao needs to pay this money back in 35 years (World Bank 2020). With this huge loan, Lao still agreed to sign the MoU.

Figure 1: Lao-China Railway Financial Structure



Lao is one country that China does not need to sell hard its infrastructure investment negotiation. First, Lao desperately needs infrastructure development. Unfortunately, Lao does not have many options because of lack of choices. The Lao government has been trying hard to attract manufacturing FDI, but due to poor infrastructure, relatively low-skilled labours, corruption, and lack of transparency, Lao has been becoming an unattractive country for investment. World Bank even positions Lao on rank 154 out of 190 countries on the “Ease of Doing Business” list (Liang 2022). The only option for Lao is China where the investment from 2003 has been skyrocketing and since 2013, FDI from China has become the largest. In 2018, China accounted for over 80% of FDI going into Lao, as a matter of fact, the gap between China’s FDI to other countries such as Thailand and Vietnam is very wide which can be clearly seen in Figure 2 (Japan International Cooperation Agency (JICA) 2020). Moreover, the relationship between China and Lao has been flourishing. Xi Jinping described the relationship as “friendly socialist neighbours with shared ideals, the same social systems and similar paths of development” (Xinhua 2017). This attitude shows that Lao and China are “Brotherhood” in political vision and development. Hence, Lao’s government believes that the spillover effects of the railway connection will make the tremendous construction cost totally worthy. The reasons mentioned above can explain why Lao started the railway in early 2016 under the framework of the Belt and Road Initiative (BRI) even though the other countries were still negotiating the project.

Figure 2: FDI in Lao based on countries and commodities



Source: Ministry of Planning and Investment (MPI)

### *The Impact of the Lao-China Railway on Economic and Social Development*

After 6 years of construction, people in Lao finally can experience travel and transport the freight by high-speed railway for the first time in their life. People are enthusiastic to ride the fast train that stop in six stations within Lao (Vientiane, Vang Vieng, Luang Prabang, Muang Xay, Luang Namtha and Boten) and in the future if the COVID restriction is lifted, it can go directly to China via Mohan, Pu'er, Yuki, and Kunming (Medina 2021). During this one year, the passengers ticket line is always crowded, the people need to reserve it 3 days before. For the freight, the railway has transported cross-border cargo of around 1.8 million tons, with a total value of over 12 billion yuan (\$1.7 billion) (Yingqing and Meiling 2022).

Although it is still too early to thoroughly examine the railway's impact on Lao's economic and social development, primarily due to pandemic restrictions, some positive impacts can be observed during this one year of implementation. The main goal of building the railway is to boost Lao's connectivity and create polarization in the economy so that Lao can overcome its landlocked situation. That the railway has reduced the 30-50% of transportation cost and provided faster delivery has enlarged the market within Lao and China (Lane 2020). Lao as the peripheral has transported raw materials such as rubber, fertilizer, and agricultural products like tropical fruits, rice, and cassava to China. In October

2022, the volume of export from Lao to China increased by around 113%, which Lao exports to China higher than the import from China with a trade balance of \$46.3M (The Observatory of Economic Complexity (OEC) 2022). This positive trend is in line with the World Bank report that the project will raise the national income level by up to 21% (World Bank 2020).

Simultaneously, the connectivity from the railway makes Lao's endowment enhanced. Besides enlarging the market, the railway is hoped to attract Foreign Direct Investment (FDI) in Lao. Lao is sandwiched by the emerging economy in the area among China, Thailand, and Vietnam. The railway will make Lao becomes the bridge to provide land transportation routes, hence it might enhance Lao's endowment as an attractive location for foreign investors in the Indo-Pacific region (Cristine 2021). Right after the opening of the railway, Asian Potash International Co. invested billions of yuan to build potash production in Lao and has an agreement with the Lao-China Railway company to ship the product by railway (X. Chen 2022). The number of FDI will also create more job opportunities for Laotians. The railway has created more than 110,000 jobs for the Lao people since its opening. This also gets along with a series of courses on train driving, scheduling and maintenance, and railway operation (Xinhua 2022). Also, language training for local young talent is held to support the operation of the international railway as well as promote tourism in Lao. The railway connects Lao's capital directly to the UNESCO World Heritage City "Luang Prabang", many Thailand tourists travel to Lao and take the high-speed railway. In the future, Chinese tourists who visit Lao by train are expected to be increased (Xinhua 2022). It can be seen that the railway will increase Lao's endowment more and will create optimistic impacts on Lao's social and economic development.

In addition, the accessibility of transportation helps people mobile effortlessly. The railway is also impactful for the education sector. Effortless mobility makes people can access high-quality education in Lao's cities or in China (CGTN 2022). The short time and convenient travel between cities along the road also enabling people to receive medical treatment faster and access better health facilities (Mixayboua and Jianhua 2022). In other words, the China-Lao Railway has enabled people to mobilize easily and comfortably which can boost the social development for Lao.

On the contrary, some Laotians also have been disadvantaged because of the railway constructions. The environmental issue becomes a significant impact that Laotians face since Lao is a mountainous and forestland country where people rely on natural and agricultural resources. During the construction, the environmental and social safeguards monitoring has been so weak (Morris 2019). It caused water pollution in some areas such as the Houay Pamom creek and Nam Lik River. It was reported that the water in Houay, District Vang Vieng has been murky and cloudy because of tunnel construction. Many fish have been dead because the river is polluted due to the chemical waste from the railway tunnel (Radio Free Asia 2020). Additionally, as the home of wild elephants, the railway construction has been endangering the population. The railway line has occupied the natural habitat of the elephant. The deforestation caused by the tunnel and railway development also worsened the wild elephant population (Sims and Pinto 2019). Deforestation also got worse because people need to give up their land for the development project.

Another issue from the railway project is land compensation. It was reported that 4,400 families lose lands without compensation. The villagers were promised get 105,000 kip

(U.S.\$10.59) per square meter for those who lost their farms and houses. The vice minister at the Lao Ministry of Public Works and Transport explained that the compensation is classified into several priorities. Citizens who lost their houses are paid first and who lost farmland might be paid later (Business & Human Rights Resource Centre 2019). However, many of them still have not received the money yet. People who have lost their farmland need to go into the forest deeper to continue their life, making deforestation rise (Radio Free Asia 2021).

### *The Challenges Lao Might Face*

Despite the positive and negative impact, the China-Lao railway will also give some challenges that Lao might face as an obstacle for its economic and social development. Even though Lao and China have vowed the railway free from corruption by setting up a special anti-corruption organization for inspection and evaluation (Keju 2019), corruption might be a great challenge for Lao to maximize the benefit of the railway. In November 2021, State Inspection Authority found losses of US\$214.7 million from corruption (Sims, Economic progress brings new challenges in Lao 2022). This shows how corruption becomes a serious threat to Lao' economic and social development. To overcome this long issue, the Lao government under President Thongloun Sisoulith has stricter the anti-corruption judiciary and money monitorization (Radio Free Asia 2022).

In addition, transnational crime namely humans and drugs trafficking seem a very serious challenge for Lao. Lao is infamous to be part of the Golden Triangle Zone where the prostitution, scamming, and humans and drug trafficking take over the area (Whong 2022). If the security check is not strict, the railway connecting to China will make the transaction easier and transnational crime more uncontrolled.

Lastly, Lao might fall into serious financial trouble. The total investment in railway projects is more than 30% of Lao's annual GDP even in 2019, the total debt that Lao owed to China stood at around 45% of the former's GDP which is very high and risky. At the beginning of the project, Lao funded US\$250M from the national budget and borrowed US\$480M from the Export Import (EXIM) Bank of China at 2.3% interest with a five-year grace period and 35-year maturity. As International Monetary Fund (IMF) has warned that the railway project has pressed Lao into external debt, Lao has been seeking more loans to pay the interest and to fund the project. This situation might force Lao into a debt trap in which China can use its power to influence the decision-making process in Lao (Zoltan and Somsack 2020).

### **Conclusion**

After one year of operation, China-Lao Railway, connecting Vientiane and Kunming directly, has shown some benefits such as job opportunities, connectivity, and education. The Vientiane-Kunming Railway is expected to create a sustainability improvement to Lao's economic and social development. The polarization effect that connects Lao as the peripheral to China as the core reduces the time and travel costs and enlarges the Lao market. By having better connectivity, Lao will shift its country from landlocked to land-linked which boosts the location endowment. Laotians also mobile easily which make them can access the education, health facility, and job in better places. However, the environmental issue found in the railway project such as water pollution and endangering





the elephant population and land compensation are still being the problem that some Laotians feel. Moreover, to surface economic and social growth and sustainability, Lao must solve the corruption issue inside the government, be strict in solving transnational crime, and calculate wiser before falling into severe financial problems due to the high loan from China.

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