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CHINA'S BELT AND ROAD INITIATIVE AND ITS ROLE IN GLOBAL POVERTY REDUCTION

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Abstract: The Belt and Road Initiative (BRI), launched by China in 2013, is one of the most ambitious global development frameworks of the 21st century. Encompassing the Silk Road Economic Belt and the 21st-century Maritime Silk Road, the initiative seeks to enhance regional integration through large-scale investments in infrastructure, trade, finance, and cultural exchange across Asia, Europe, Africa, and beyond. While the BRI has mobilized unprecedented financial resources and expanded connectivity to more than 140 countries, it has also raised concerns over debt sustainability, governance challenges, and the growing dependence of participating nations on China. These issues have generated debate over whether the initiative is a genuine development strategy or a geopolitical instrument that prioritizes China's strategic interests. This study adopts a qualitative approach through critical review and synthesis of existing literature, policy reports, and secondary data. The analysis focuses on the BRI's structural pillars, economic potential, and emerging challenges, particularly its implications for poverty reduction and sustainable development. Findings indicate that the BRI plays a dual role as both a driver of development and an instrument of geopolitical influence. While infrastructure development has created new opportunities for trade and connectivity, debt risks, transparency, and environmental sustainability challenges persist. Moreover, the initiative's long-term impact varies significantly across participating countries, depending on governance capacity and policy alignment. The study recommends the development of a more transparent, inclusive, and sustainable BRI framework that emphasizes equitable partnerships, debt management strategies, and environmentally responsible investments. Strengthening multilateral cooperation and embedding robust governance mechanisms will ensure that the BRI contributes meaningfully to global poverty reduction and long-term development goals.



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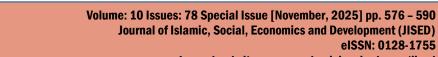
Introduction

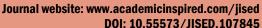
The Belt and Road Initiative (BRI), introduced by President Xi Jinping in 2013, represents one of the modern era's most ambitious global development strategies. Conceived as a revival of the ancient Silk Road, the BRI now links over 140 countries through large-scale investments in transport, energy, trade, and digital infrastructure. Beyond its strategic and geopolitical implications, the initiative is closely aligned with the United Nations Sustainable Development Goal 1 (No Poverty), positioning itself as a catalyst for improving livelihoods and reducing socio-economic inequalities between developed and developing nations (Xie, 2023). Empirical findings reinforce this potential, with Ma (2022) identifying a negative correlation between BRI participation and poverty incidence, particularly among lower-middle-income economies and border countries where enhanced connectivity promotes trade, employment generation, and technology transfer. Concrete examples such as the China–Laos Railway, which has spurred rural economic opportunities (Chan, 2021), the Mombasa–Nairobi Standard Gauge Railway in Kenya, which reduced freight costs by 40% (Nyangena, 2020), and Kazakhstan's upgraded logistics hubs, which stimulated trade and employment (Akhmetov, 2022), further illustrate the tangible socio-economic benefits of BRI projects.

At the global level, the World Bank (2019) projects that BRI-related infrastructure could lift 7.6 million individuals out of extreme poverty and 32 million out of moderate poverty, provided that robust governance mechanisms and environmental safeguards accompany projects. Reduced trade costs, estimated at up to 3.2% for participating economies, highlight the initiative's potential to drive inclusive growth, particularly in marginalized regions. Nevertheless, scholars caution that the impact of poverty alleviation on the BRI is not automatic but contingent on effective policy frameworks and implementation strategies. Key recommendations emphasize the importance of ensuring debt sustainability through transparent loan arrangements (Hurley et al., 2019), embedding local skills development programs to enhance workforce participation (Zhang, 2020), prioritizing investments in rural and underserved communities rather than focusing solely on urban mega-projects (Xie, 2023), and integrating environmentally sustainable practices to secure long-term development gains (Ma, 2022). Collectively, these considerations underscore the dual nature of the BRI as both a vehicle for international connectivity and a potential instrument for sustainable poverty reduction when executed with inclusivity and accountability.

Problem Statement

Despite the significant advancements made under the United Nations Millennium Development Goals (MDGs), poverty remains a persistent concern, especially in its multifaceted form. Many emerging nations in Asia and Africa continue to face systemic barriers that restrict their capacity to achieve sustainable development. Deficiencies in infrastructure, such as ports, highways, energy systems, and digital networks, hinder economic growth and connectivity (Chang, Lu, & Sui, 2021; Ahmad, 2022), while high levels of debt distress and limited access to sustainable financing constrain governments' ability to implement long-term poverty reduction strategies (Hurley, Morris, & Portelance, 2019). Furthermore, weak integration into global value chains reduces trade competitiveness and prevents many developing economies from fully benefiting from globalization (Li & Taube, 2018; Stojanovic, 2019).







In this context, comprehensive initiatives such as China's Belt and Road Initiative (BRI) are increasingly viewed as potential mechanisms for addressing structural inequalities and promoting inclusive development (Xie, 2023; Ma, 2022). However, the extent to which the BRI contributes to poverty reduction remains underexplored, particularly concerning its geopolitical, economic, and social implications.

The purpose of this study is to examine the geopolitical implications of the BRI and their influence on poverty reduction in participating countries, to evaluate the economic impacts of BRI infrastructure and trade projects on income growth, employment, and market access in underdeveloped regions, and to assess the social outcomes of BRI projects, including improvements in access to essential services, reduction of inequality, and enhancement of community well-being.

Literature Review

The Belt and Road Initiative (BRI) has garnered considerable academic interest across various fields, especially concerning its effects on development and poverty alleviation. Rolland (2017) characterises the BRI as a strategic expansion of China's influence throughout Eurasia and Africa, with infrastructural corridors fulfilling economic and diplomatic functions. Stojanovic (2019) emphasises that the program augments China's strategic depth by associating investment flows with political influence, thereby altering global and regional power relations. Nonetheless, liberal interpretations, exemplified by Li and Taube (2018), underscore the reciprocal character of BRI cooperation, portraying it as a conduit for mutual progress and regional integration rather than unilateral hegemony. This literature highlights the intricate geopolitical and strategic factors associated with the BRI, establishing a basis for discussing its broader socio-economic implications.

Academics have analysed the BRI as a dual phenomenon, presenting both a potential for economic expansion and a source of financial peril. Ma (2022) indicates that involvement in the BRI is associated with quantifiable decreases in poverty rates, especially in lower-middleincome nations, implying that infrastructural connection promotes trade growth, employment generation, and technological diffusion. The World Bank (2019) simulation model projected that BRI-related initiatives might lift millions out of poverty by reducing trade expenses and enhancing market accessibility. Hillman (2020) contends that the initiative's financing strategy subjects partner countries to increased debt risks, inadequate governance, and excessive dependence on Chinese money, generating fiscal sustainability issues. The East Coast Rail Link (ECRL) in Malaysia epitomises the potential and the contentious nature of Belt and Road Initiative (BRI) projects in Southeast Asia. The 665 km railway, intended to link the underdeveloped East Coast states with Kuala Lumpur and Port Klang, is anticipated to enhance trade, decrease travel duration, and establish new economic corridors. Nonetheless, discussions on cost escalation, debt sustainability, and prolonged reliance on Chinese finance underscore the dual aspects of BRI investments in reconciling developmental benefits with fiscal dangers. Lee (2021).

The literature emphasises the significance of inclusion and sustainability in achieving the development objectives of the BRI on social and environmental levels. Xie (2023) warns of a "urban-only mega-project bias," contending that the emphasis on metropolitan-scale initiatives may neglect rural and neglected areas that would gain significantly from enhanced infrastructure. Researchers like Zhang (2020) assert that integrating local capacity-building and workforce training into BRI projects amplifies their enduring social worth by guaranteeing that

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local communities directly reap the benefits of development efforts. The ECRL exemplifies the potential to enhance rural connectivity in Malaysia's East Coast states, which might lead to greater access to education, healthcare, and agricultural markets, contingent upon integrating local populations in the project's design and implementation. Simultaneously, environmental issues, mainly deforestation and the disturbance of delicate ecosystems, have been highlighted, emphasising the necessity for enhanced ecological protection (Ahmad, 2022). These studies indicate that the BRI's potential for alleviating poverty and fostering inclusive development depends on balancing economic efficiency, social inclusion, and environmental stewardship.

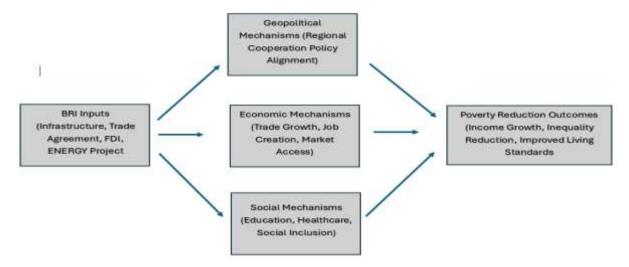


Figure 1: Conceptual Framework: Belt and Road Initiative and Poverty Reduction

Methodology

This research relies on secondary data to understand the impact of the Belt and Road Initiative (BRI). The data are collected and referenced from several sources, including academic journals, government documents, websites, and previous research studies, as shown in Figure 2.

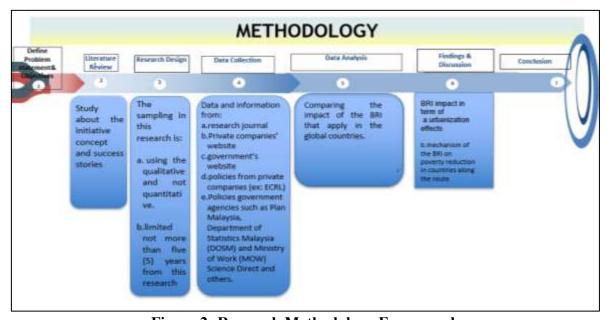


Figure 2: Research Methodology Framework



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From the journal articles, the study seeks to interpret and relate how BRI contributes to global poverty reduction. All the information is analysed using a qualitative approach, as the study does not involve direct data collection, experiments, or field surveys. Instead, it analyzes and synthesizes findings from prior literature and official documents. This methodology ensures the research is based on verified and credible references while allowing flexibility to interpret broader socio-economic impacts.

Sampling and Data Collection

The sampling method applied in this research is qualitative rather than quantitative. This approach is chosen because the study relies on secondary data and information obtained from previous research journals, private company websites, government websites, and policy documents from both private companies and government agencies, such as Plan Malaysia and the Department of Statistics Malaysia (DOSM), as well as selected articles.

The data sampling is limited to sources published within the last five (5) years from this research to ensure relevance. The information and data extracted from these sources include policies, statistical evidence, and projections that can explain the positive or negative impacts of the Belt and Road Initiative (BRI). The sampling and data derived from policy documents are presented as statistics, estimates, and contextual explanations based solely on the reviewed studies. Importantly, the data is not collected through direct scientific experiments, testing, or laboratory analysis but through systematic qualitative review.

For example, data related to the East Coast Rail Link (ECRL) has been obtained from databases and websites of private companies (such as ECRL Operations Sdn. Bhd.), as well as the Plan Malaysia website, academic journals on the BRI, the Ministry of Works Malaysia, ScienceDirect, and other relevant sources. These references are used to gather the information necessary to fully understand the context of the BRI in Malaysia and its implications.

Discussion

Geopolitical Implications of the BRI and Poverty Reduction

Geopolitically, the Belt and Road Initiative (BRI) is an extensive connectivity framework that reshapes participating nations' international partnerships, financial avenues, and domestic policy orientations. Its impact on poverty reduction operates through expanded development finance, debt dynamics, and policy reforms that influence local governance structures. By increasing the availability of long-term funding for transport and energy systems, the BRI helps ease critical public investment constraints in lower-income countries. This has accelerated the development of trade corridors that reduce commerce costs and link underdeveloped regions to economic hubs. Projections indicate that if BRI transport projects are completed and complemented by additional policy reforms, they could reduce travel times by 12%, increase real incomes by up to 3.4%, and lift approximately 7.6 million people out of extreme poverty by 2030 (World Bank, 2019; Maliszewska & van der Mensbrugghe, 2019). However, these potential gains depend on transparent procurement processes, fair financing arrangements, and social and environmental safeguards adherence.

Nevertheless, the initiative's geopolitical priorities have occasionally led to weaker financial oversight and fast-tracked projects that bypass thorough economic evaluation. Some BRI participants face heightened debt vulnerability, and fiscal crises in such contexts often result in spending cuts that disproportionately affect social services, reversing previous poverty



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reduction gains (Hurley, Morris, & Portelance, 2018). On the other hand, the BRI's global prominence has pushed "connectivity" higher on national policy agendas, stimulating reforms in customs, logistics, and special economic zones. When infrastructure investment is paired with governance and trade efficiency improvements, income and poverty reduction gains are significantly amplified (De Soyres et al., 2018; World Bank, 2019).

Despite its potential, achieving equitable and sustainable poverty reduction through the BRI is not guaranteed. The durability of positive outcomes relies heavily on the quality of financing, institutional strength, and protective measures. Persistent challenges include debt risks that constrain public spending, governance weaknesses that limit transparency and local benefits, and inconsistent social and environmental protections that undermine community welfare (World Bank, 2019; Jones & Hameiri, 2020). Addressing these concerns requires embedding transparency, responsible borrowing, and community engagement within the broader geopolitical framework of the BRI.

Economic Impacts on Income Growth, Employment, and Market Access

Economically, the BRI has demonstrated measurable effects on income growth, employment creation, and market accessibility, particularly in regions with previously poor connectivity. Transport corridors under the initiative reduce trade and transport costs, expanding market access and increasing real incomes, with the most substantial impacts observed in low-income countries (World Bank, 2019; Maliszewska & van der Mensbrugghe, 2019). With full implementation and supportive domestic reforms, trade volumes among BRI economies could rise by up to 10%, and real incomes could increase by 3.4%. Empirical analyses further confirm that BRI participation is causally linked to reductions in national poverty rates, driven by trade expansion, financial inclusion, foreign investment, and digital infrastructure upgrades (Xie et al., 2023).

Large-scale BRI projects also generate employment opportunities, particularly during the construction phase and, in successful cases, in long-term operations and maintenance. However, local employment benefits are most significant when competitive bidding, local firm participation, and skills training programs are in place. Over-reliance on imported labour diminishes these effects and may weaken public support (Council on Foreign Relations, 2021). Underdeveloped and landlocked regions can gain the most from new corridors, but only if supported by complementary investments in feeder roads, customs modernization, and small business financing. Without such integrated planning, new infrastructure may remain underutilized and become a fiscal burden (World Bank, 2019).

Nonetheless, several risks continue to challenge the economic sustainability of BRI projects. Weak project selection, limited local linkages, incomplete corridor development, and fiscal pressures in poorer regions can undermine intended outcomes. Projects based on unrealistic forecasts or non-transparent contracts risk becoming underused liabilities. Therefore, rigorous cost-benefit analyses, local participation policies, and careful debt management are essential to ensure that infrastructure investments translate into inclusive economic growth and long-term poverty reduction (World Bank, 2019; Council on Foreign Relations, 2021).

Social Outcomes: Access, Inequality, and Community Well-Being

Beyond macroeconomic indicators, the BRI's social impact reflects a complex interaction between infrastructure expansion and community welfare. While improved transport and energy systems can reduce travel times to schools and clinics and increase electricity access,



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the extent of these benefits depends on inclusive project design and equitable access. When projects include feeder roads, affordable pricing, and last-mile connectivity, the use of essential services rises significantly (World Bank, 2019; The Asia Foundation, 2022). The initiative's effect on inequality, however, is mixed. Poverty reduction is more substantial when supported by inclusive policies such as small business financing and transparent procurement; in their absence, benefits tend to concentrate among established firms in developed areas, potentially widening income disparities (Xie et al., 2023).

Community well-being is also closely tied to governance practices. Projects that uphold fair labour standards, protect worker rights, and ensure environmentally responsible development enjoy greater local acceptance. Conversely, those relying heavily on foreign labour or lacking transparency often encounter resistance, undermining social stability and project sustainability (Council on Foreign Relations, 2021; World Bank, 2019). Persistent challenges include unequal access for marginalized groups, limited local capacity, and environmental degradation. Addressing these issues requires inclusive planning, local skills training, and climate-resilient infrastructure design to ensure that the BRI contributes positively to human development and community resilience (The Asia Foundation, 2022).

Comparison with the Malaysian Case: The East Coast Rail Link (ECRL)

Within the Malaysian context, the East Coast Rail Link (ECRL) represents one of the most significant BRI infrastructure projects in Southeast Asia. This research focuses on several dimensions of the ECRL's impact, including economic growth, urbanization patterns, transportation efficiency, and health and education access improvements. According to the World Bank (2023), the ECRL is projected to stabilize Malaysia's post-pandemic economic recovery, enhancing connectivity between the East and West Coasts and stimulating regional development. Its success, however, will depend on the extent to which economic and social benefits are distributed equitably, local communities are integrated into the project's value chain, and governance standards are maintained throughout implementation.

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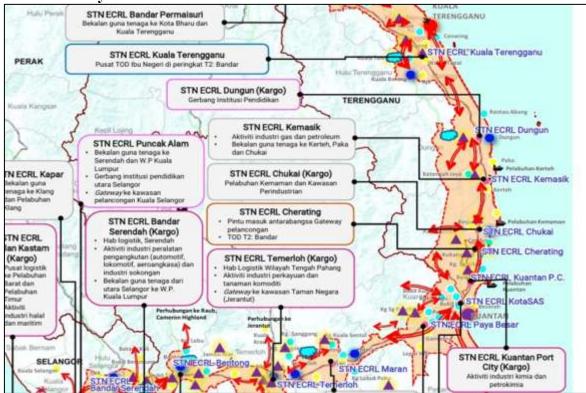


Figure 3: The Development Concept of the East Coast Railway Corridor (ECRL)
Alignment

(Source: Pelan Induk Bersepadu Guna Tanah Laluan Rel Pantai Timur (ECRL))

Figure 3 above shows the statistical data used by the World Bank, sourced from the Department of Statistics Malaysia (DOSM). The Malaysian growth is -5.5% due to the COVID-19 recession. However, in 2021, the economic growth showed a positive recovery to 3.3% and improved to 8.7% as the post-pandemic economic rebound. Then, the increase is projected to be around 3.9 to 4.3% in 2023 and 2024. The report mentions that the growth is supported by ongoing and new mega projects like East Coast Rail Link(ECRL), Pan Borneo, and LRT3. Therefore, the construction of projects like ECRL has stabilized Malaysia's economy. The joint venture between China Communications Construction Co. and Malaysia Rail Link (MRL) was formed when Malaysia's Prime Minister Najib, representing the Malaysian government in 2016, signed an agreement with the Chinese government to facilitate the project. This RM55 billion mega project, involving close cooperation between Malaysia and China, has indirectly created significant impacts during its construction phase, particularly in the economy, expertise sharing, and technology transfer, while attracting investors.



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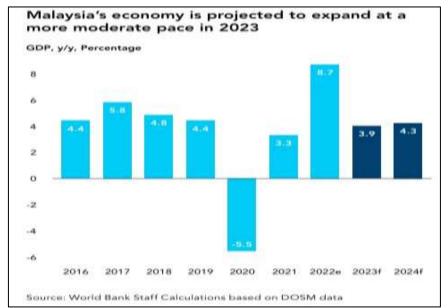
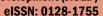


Figure 4: Malaysia's economy is projected to expand more moderately in 2023 (Source: World Bank Staff Calculation based on DOSM Data)

Job Opportunity

In September 2025, the East Coast Rail Link (ECRL) project strengthened its socio-economic contribution by providing employment opportunities to thirteen graduates from Universiti Teknologi Malaysia (UTM). China Communications Construction Sdn offered these positions. Bhd. (CCC-ECRL), The main contractor responsible for implementing the project in Malaysia (Norazwa Yeop Kamarudin, 2025). Such initiatives highlight the commitment of the ECRL project to fostering human capital development among Malaysian youth, particularly through direct industry participation and skill enhancement. The graduates are expected to undergo structured on-the-job training that facilitates knowledge and technology transfer between Malaysian and Chinese experts. This hands-on experience enhances their technical expertise and professional readiness and contributes to building a more competitive workforce within Malaysia's rail and infrastructure sectors.

From a broader developmental perspective, these employment and training opportunities are instrumental in nurturing a generation of skilled professionals capable of sustaining Malaysia's growing transportation industry. The initiative also aligns with national objectives of increasing employability among local graduates, improving income levels, and reducing poverty through access to high-value jobs. In the long term, such collaborations are anticipated to strengthen Malaysia's rail industry by creating a pool of qualified professionals from both the public and private sectors, thereby advancing the nation's industrial competitiveness and technological capacity.



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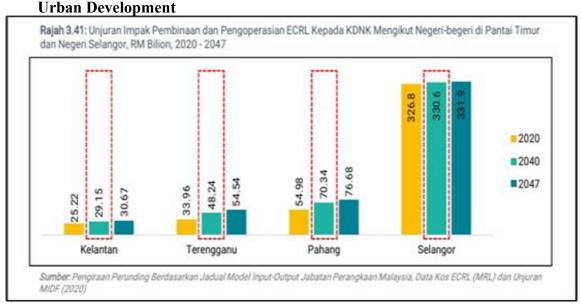


Figure 5: Construction and Operational Projection Impact for the East Coast State of Malaysia

(Source: Pelan Induk Bersepadu Guna Tanah Laluan Rel Pantai Timur (ECRL))

Refers to the projected data from the Plan Malaysia, the high volume of construction activities for the ECRL for Kelantan, Terengganu, Pahang, and Selangor for 2020, 2040, and 2047. All mega projects will positively impact construction and economic activities in nearby areas. The project is expected to generate significant economic spillover effects, benefiting small-scale entrepreneurs and local communities near the project areas. For example, Terengganu is projected to have construction-related costs of RM48.24 billion. And Pahang is projected to be RM70.34 billion. These RM70 billion in Pahang and RM48 billion in Terengganu will be good opportunities for small entrepreneurs and residents near this ECRL project as a source of income and to improve their standard of living. Good infrastructure and transportation facilities are also factors that attract investors to areas near ECRL stations. This, in turn, stimulates population growth, economic activity, and residential demand. Then, the level of urbanization within a particular area will be influenced primarily by the size and concentration of its population. For example, Figure 3 is the projected population according to the Plan Malaysia, which shows the increase in population within 5 kilometers of the ECRL Station.



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Stesen ECRL	*Anggaran Penduduk Semasa (2020)	Unjuran Tambahan Penduduk			
		5 tahun (2025)	10 tahun (2030)	15 tahun (2035)	20 tahun (2040)
		TERENGGA	NU		
Jerteh (P)	23,091	23,746	24,401	25,056	25,711
Anggaran Tambahan Penduduk (2040 – 2020)					+ 2,621
Bandar Permaisuri (P)	4,422	5,049	5,676	6,303	6,929
Anggaran Tambahan Penduduk (2040 – 2020)					+ 2,507
Kuala Terengganu (P)	8,050	14,411	20,772	27,133	33,494
Anggaran Tambahan Penduduk (2040 – 2020)					+ 25,444
Dungun (P+K)	22,999	24,871	26,743	28,615	30,487
Anggaran Tambahan Penduduk (2040 – 2020)					+ 7,487
Kemasik (P)	10,979	15,507	20,034	24,562	29,089
Anggaran Tambahan Penduduk (2040 – 2020)					+ 18,110
Chukai (P+K)	34,534	37,025	39,516	42,006	44,497
Anggaran Tambahan Penduduk (2040 – 2020)					+ 9,962
		PAHANG	Ų .		
Cherating (P)	2,038	5,549	9,061	12,573	16,084
Anggaran Tambahan Penduduk (2040 – 2020)					+ 14,047
KPC (P+K)	6,614	7,932	9,249	10,567	11,884
Anggaran Tambahan Penduduk (2040 – 2020)					+ 5,270
Kota SAS (P)	10,985	15,046	19,107	23,168	27,229
Anggaran Tambahan Penduduk (2040 – 2020)					+ 16,244
Paya Besar (P+K)	1,205	3,649	6,092	8,536	10,979
Anggaran Tambahan Penduduk (2040 – 2020)					+ 9,774
Maran (P+K)	641	1,741	2,840	3,940	5,039
Anggaran Tambahan Penduduk (2040 – 2020)					+ 4,398
Temerioh (P+K)	5,620	9,524	13,428	17,331	21,235
Anggaran Tambahan Penduduk (2040 – 2020)					+ 15,615
Bentong (P+K)	11,616	13,848	16,079	18,310	20,542
Anggaran Tambahan Penduduk (2040 – 2020)					+ 8,926

Figure 6: Population Projection for the East Coast State of Malaysia

(Source: Pelan Induk Bersepadu Guna Tanah Laluan Rel Pantai Timur (ECRL))

From Figure 6, all districts in Terengganu and Pahang will increase in population. For comparison, Kuala Terengganu in 2020 had a population of 8,050 people, which is expected to increase to 33,494 people (an increase of 25,444 people). Dungun in 2020 had a population of 22,999 people, which is expected to increase to 30,487 people (an increase of 7,487 people). Meanwhile, Kota SAS, Pahang, 2020 had a population of 10,985 people, which is expected to increase to 22,229 people (an increase of 16,244 people).

The population study from this table shows that the increase in population within 5 km of the ECRL stations can be linked to greater demand for housing, infrastructure, efficient transportation, and improved facilities. This can also be related to the key BRI goals of stimulating urban development through enhanced connectivity. Improvements in facilities drive the growth, the availability of job opportunities, and the expected rise in living standards in areas surrounding the ECRL. Moreover, the ECRL has enhanced connectivity between towns, allowing residents of Dungun to commute to Kuantan and Kota SAS more easily and with significant time savings. This impact can also happen to all ECRL routes that pass through, sparking the interest of several economic sectors to begin growing. Among these sectors are the residential construction sector, the transportation sector, and the international joint venture.



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Transportation

The efficiency of transportation will increase when travel time reduces, and cost efficiency will attract people to use the ECRL. This direct rail link will provide a fast, cost-efficient route for container cargo between the East and West coasts, strengthening Malaysia's trade and logistics hub position. "ECRL, which re-commenced work in 2019, is currently under construction for the alignment from Dungun to Mentakab and is expected to be completed by 2026. These projects, which link the east and west coast regions, will reduce travel time and spur trade and economic activities along the alignment". Twelfth Malaysia Plan, 2021-2025, page 415.

The roads, highways, and signage near East Coast Highway (LPT2) and Kuantan Airport have been upgraded to accommodate ECRL usage. This direct rail link will provide a fast, costefficient route for container cargo between the East and West coasts, strengthening Malaysia's trade and logistics hub position.

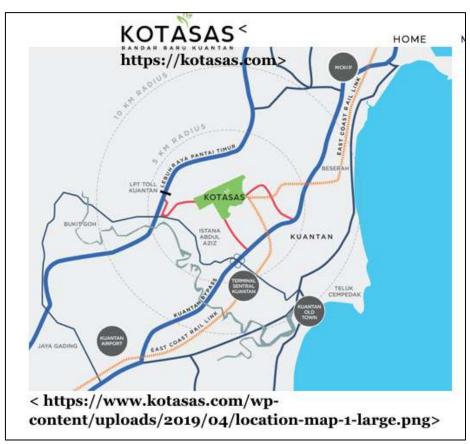


Figure 6: KOTASAS Kuantan Pahang Development

(Source: Malaysia Investment Development Authority (MIDA)

Figure 6 above is from the Malaysia Investment Development Authority (MIDA), which shows the connectivity of Port Klang, Malaysia, China Kuantan Industrial Park (MCKIP), and Kuantan Port. By connecting Port Klang, MCKIP, and Kuantan Port, the ECRL enables smoother trade flows, boosts cargo throughput, and attracts container liners, opening new trade routes to China and other key destinations. To prepare for the ECRL's arrival, Kuantan Port is expanding its container operations, investing in critical equipment, and optimising scheduling processes to improve operational efficiency. The more efficient connectivity with the construction of advanced railways will increase people's interest in buying houses near ECRL



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stations. At the same time, this is a good situation for the property sector, which went through difficult times during COVID-19 in 2019.

Health and Education

According to the *Pelan Induk Bersepadu Guna Tanah Laluan Rel Pantai Timur (ECRL)*, numerous development projects have been proposed along the ECRL alignment, encompassing various sectors such as education and healthcare. These developments indicate the government's commitment to leveraging the ECRL corridor as a regional growth and social well-being catalyst. In Dungun, Terengganu, several key projects have been implemented in parallel with the railway construction. For instance, the Minister of Health, YB Datuk Seri Dr. Dzulkefly Ahmad, officiated the Handover Ceremony of the Dungun Hospital Project, the Kota Putera Health Clinic (Type 3) in Besut, and the Paya Datu Health Clinic (Type 7) in Kuala Terengganu on 24 August 2024 (Ministry of Health Malaysia, 2024). This development reflects the strengthening of healthcare infrastructure along the ECRL route, enhancing public access to essential medical services. In addition to health facilities, educational projects are also being developed in the area. The *Maktab Rendah Sains MARA (MRSM)* Dungun project, valued at RM97.4 million, is currently under construction, further supporting human capital development and regional educational opportunities (Azanis Sahila Amam, 2021).

The newly built Dungun Hospital is located approximately five kilometers from the proposed ECRL Dungun Station, which is planned to be developed as a Transit-Oriented Development (TOD) zone. This strategic spatial relationship will generate positive multiplier effects through infrastructure upgrades, including improved road networks and utility services. The proximity between the hospital and the ECRL station will also enhance accessibility for patients, visitors, and healthcare personnel, facilitating more efficient mobility and operational integration with surrounding urban amenities. Overall, these developments illustrate how the ECRL project functions not only as a transportation corridor but also as a driver of integrated regional development, particularly in the domains of health and education.

Conclusion

The Belt and Road Initiative (BRI) has significantly reduced poverty by generating transformational impacts across participating countries. The urbanization process closely aligns with the BRI's strategic objectives of enhancing trade, logistics, and regional connectivity. Empirical evidence suggests that the initiative has successfully driven urban development by creating employment opportunities, improving public facilities, and attracting high-quality investments. In regions near BRI project sites, communities have gradually transitioned from low-income agricultural activities to higher-paying non-agricultural occupations such as construction work, engineering, and technical services. This structural shift not only raises household incomes but also contributes to skills development and overall improvements in living standards. Moreover, the influx of large investors and new domestic and international industries stimulates demand for goods and services, promoting entrepreneurship and generating long-term employment opportunities. Such economic diversification enhances local resilience and underscores the BRI's effectiveness as a mechanism for sustainable poverty alleviation. In the Malaysian context, the East Coast Rail Link (ECRL) is a flagship BRI infrastructure project connecting the East and West Coasts, embodying the initiative's goals of improved trade efficiency, logistics integration, and regional development. The ECRL has yielded multiple socio-economic benefits, including attracting foreign investment, stimulating local businesses, improving mobility and travel efficiency, expanding access to education and technical training, and enhancing healthcare and urban infrastructure. It has also strengthened



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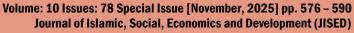
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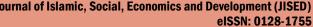
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Malaysia—China relations, positioning Malaysia as one of China's key strategic partners in Asia. The ECRL is a compelling case study of how international collaboration under the BRI framework can foster economic growth, accelerate urbanization, and contribute meaningfully to long-term poverty reduction.

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References

- Ahmad, N. (2022). Environmental implications of China's Belt and Road Initiative: A Malaysian perspective on the East Coast Rail Link (ECRL). Journal of Environmental Policy and Management, 24(3), 45–60.
- Akhmetov, R. (2022). Kazakhstan and the Belt and Road Initiative: Economic and strategic perspectives. Central Asian Journal of Development Studies, 9(2), 45–61.
- Chan, S. (2021). Laos-China railway: Opportunities and challenges for poverty alleviation. Asian Development Policy Review, 9(3), 221–238.
- Chang, K., Lu, J., & Sui, J. (2021). BRI: Analysis of the East Coast Rail Line (ECRL) in Malaysia. BCP Business & Management, 16, 70–77.
- De Soyres, F., Mulabdic, A., Murray, S., Rocha, N., & Ruta, M. (2018). How much will the Belt and Road Initiative reduce trade costs? Washington, DC: World Bank.
- Hurley, J., Morris, S., & Portelance, G. (2019). Examining the debt implications of the Belt and Road Initiative from a policy perspective. Washington, DC: Center for Global Development.
- INSAP (Rongzhi). (2022). Social impact and community perception of Belt and Road Initiative projects in Malaysia. Kuala Lumpur/San Francisco: The Asia Foundation.
- Malaysia's East Coast Rail Link: A double-edged sword for the environment and wildlife. (2017). Mongabay. Retrieved from https://news.mongabay.com/2017/08/malaysias-eastcoast-rail-link-a-double-edged-sword-for-environment-wildlife
- Maliszewska, M., & van der Mensbrugghe, D. (2019). The Belt and Road Initiative: Economic, poverty, and environmental impacts (Policy Research Working Paper No. 8814). Washington, DC: World Bank.
- Ministry of Health Malaysia. (2024). Healthcare infrastructure developments along the ECRL corridor. Putrajaya: Ministry of Health Publications
- Nyangena, W. (2020). Kenya's Standard Gauge Railway and its impact on trade costs. Nairobi: African Economic Research Consortium.
- Stojanovic, D. (2019). China's Belt and Road Initiative: A geopolitical and geo-economic analysis. *Asian Affairs*, 50(2), 165–183.
- World Bank. (2019). Belt and Road Economics: Opportunities and Risks of Transport Corridors. Washington, DC: World Bank.
- Xie, N., Chen, A., Wang, X., & Zhang, X. (2023). Does the BRI contribute to poverty reduction in countries along the Belt and Road? A DID-based empirical test. Humanities and Social Sciences Communications,
- Xie, Y. (2023). The Belt and Road Initiative and Sustainable Development Goal 1: Pathways to poverty alleviation. Journal of Contemporary East Asian Studies, 11(1), 23–41.
- Zhang, L. (2020). Capacity building and local workforce development in Belt and Road projects.