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## THE PROSPECT OF PALEKBANG BRIDGE: A DRIVE FOR INCLUSIVE AND EQUITABLE GROWTH IN KELANTAN

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# THE PROSPECT OF PALEKBANG BRIDGE: A DRIVE FOR INCLUSIVE AND EQUITABLE GROWTH IN KELANTAN

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## ABSTRACT

The East Coast Economic Region (ECER) was established in 2007 with the announcement of the ECER Master Plan by the Malaysian Government. Meanwhile, the ECER Development Council (ECERDC) is driving development in the ECER by launching several high-impact projects and programmes to promote socioeconomic transformation by increasing private investment in the region. The ultimate goal is to close the socioeconomic gap between East and West Coasts by empowering local communities to benefit from job and entrepreneurial opportunities. One of the ECER projects is the construction of the Palekbang Bridge in Kelantan, which will connect Kota Bharu and Palekbang, Tumpat. The bridge construction is critical in light of two factors: Congestion at the Sultan Yahya Petra Bridge and limited growth in the Kota Bharu city centre. This paper discusses the role of ECERDC as the primary monitoring body for the project, as well as the potential of the Palekbang Bridge to provide physical, economic, and social benefits to citizens. It is hoped that the bridge construction will address congestion and limited growth, stimulate trade activities, improve connectivity, and accessibility. As a result, economic growth across all economic sectors will be boosted in the coming years.

Keywords: ECERDC, Palekbang Bridge, Congestion, City growth, Connectivity, Trade

## Introduction

The Malaysian government stated its plans for becoming a developed nation when Vision 2020 was initially proposed in 1991 promptly by being innovative, not just in terms of finance and physical environment, but also in mindset and way of thinking. This can only be accomplished by diversifying the economy and strengthening capacity. Through East Coast Economic Region Development Council (ECERDC), numerous high-impact initiatives and programmes have been carried out in the states of Kelantan, Terengganu, and Pahang, as well as the district of Mersing in Johor (ECERDC, 2008). These projects have improved citizens' lives by increasing wealth creation and creating more job and entrepreneurial opportunities (ECERDC, 2009, 2010, 2011). Despite progress in ECER, the East Coast states in Peninsular Malaysia continue to lag socioeconomically behind the West Coast states (ECERDC, 2012). As a result, it must be reevaluated so that the development is not measured merely by GDP growth and per capita income only, but also by "shared prosperity for all", which refers to making sure that no Malaysian, regardless of their situation, is left behind.

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### **ECER Masterplan**

The formation of the East Coast Economic Region (ECER) was established in 2006, when the Federal Government tasked PETRONAS<sup>1</sup> with creating a holistic development strategy covering Kelantan, Terengganu, Pahang states, and the Mersing district of Johor (ECERDC, 2019b).

The government wanted to close the socio-economic gap between Malaysia's East and West Coasts to give local people more authority and improve citizens' livelihoods (Husin & Ibrahim, 2014).

The East Coast of Peninsular Malaysia was a socioeconomically underdeveloped area with a high out-migration rate and low family income. Low private investment has made it harder for locals to create jobs (ECERDC, 2013). In search of greater job prospects and higher incomes, many locals have moved from the area toward more developed urban areas, mainly on the West Coast (Sany *et al.*, 2018).

On the other hand, there is tremendous room for expansion for the ECER. The area is blessed with distinctive natural beauty, plenty of resources, and unique culture and tradition that are well-known worldwide (Mohd *et al.*, 2019). As a result, the ECER's soft and hard infrastructure must be improved to boost its competitiveness (Rahim *et al.*, 2021).

To accelerate ECER's socio-economic development in line with Vision 2020, Hon. Datuk Seri Jebasingam Issace John<sup>2</sup> led a special team to develop the first ECER Master Plan, which was completed following extensive studies, research, and consultations.

In 2007, the ECER Master Plan was formally introduced, officially establishing ECER. The region encompasses Kelantan, Terengganu, Pahang, and Johor districts of Mersing, accounting for 51% of Peninsular Malaysia's total area with a population of more than 4.3 million people (ECERDC, 2014). As a result, ECER's development programmes have been aligned with various national policies, such as the New Economic Model (NEM) and the Bumiputera Economic Empowerment Agenda.

The East Coast Economic Region Development Council (ECERDC) was formally established as a Federal Statutory Body under Act 688 shortly after (ECERDC, 2008). The goal of ECERDC was to implement the projects and programmes outlined in the ECER Master Plan and speed up the socio-economic transformation of the region by boosting private investment, which in turn would increase job and entrepreneurial opportunities, household income, and the rate of migration out of the area (ECERDC, 2015).

<sup>1</sup>PETRONAS is Malaysian national oil and gas company

<sup>2</sup>Chief Executive Officer, East Coast Economic Region Development Council (ECERDC), 2007

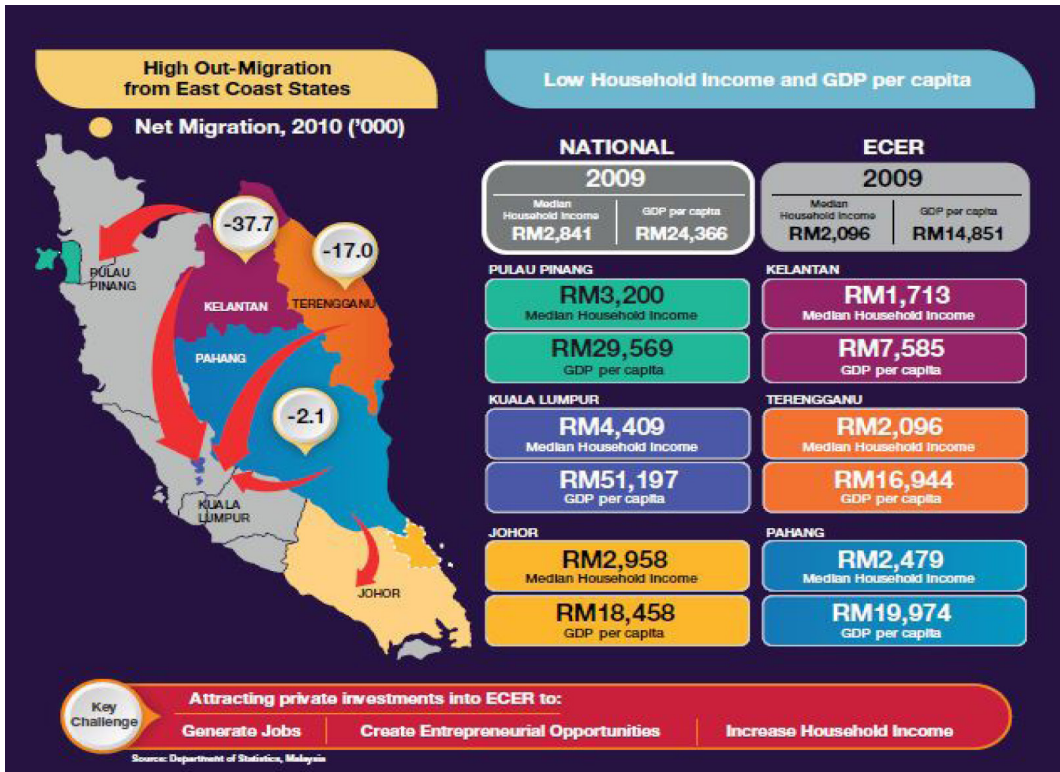


Figure 1: Migration from the East Coast States  
(Source: ECER Masterplan 2.0)

ECERDC developed the region using three working principles:

- A consultative and cooperative approach between Federal and State agencies, as well as their representatives, in order to guarantee that stakeholders' perspectives are considered for the benefit of the region as a whole (regional perspective).
- Emphasises the importance of community empowerment through job creation, talent development and upskilling for future jobs, entrepreneurial opportunities, and an inclusive approach while

addressing the needs of specific target groups, such as indigenous people, young people, women, and the Bumiputera community.

- To guarantee equitable development distribution and rural-urban integration given the region's size (which comprises 51% of Peninsular Malaysia), Key Development Areas (KDAs) or Nodes have been designated based on resource and population concentration. The governance structure of ECERDC is summarised in the table below.

Table 1: East Coast Economic Region Development Council Governance Structure

Committee	Level	Chairperson	Key Responsibilities
The Council	ECER	Hon. Prime Minister (Act 688-Sec 10)	-Policies, vision, and regulatory framework  -Approval and resolution of strategic issues in ECER projects and programmes
The Implementation & Coordination Committee	State	Hon. Chief Minister (Act 688-Sec 10)	-Review the planning and implementation of ECER projects and programmes. -Resolving strategic issues on ECER projects and programmes in respective states
The Management Committee	ECERDC	CEO, ECERDC (Act 688-Sec 14)	-Execute policies and strategies in collaboration with the Ministries of Finance and Economic Affairs. -Drive strategic project planning and implementation, attract private investment into ECER, and implement human capital development programmes. -Develop new or enhanced policies and strategies -Works as part of a multidisciplinary team to support the vision and mission of the organisation.

(Source: ECER Master Plan 2.0)

Act 688, which outlines the governance and decision-making process, enshrines the consultative and collaborative approach. Various committees' roles and responsibilities were clearly defined to ensure transparency and good governance. The Act also establishes the direction, policies, and strategies for development within ECER, as well as cooperation between public bodies in promoting business, investment, travel, and development initiatives within ECER, in addition to issues connected with or ancillary to that (ECERDC, 2016).

**Concentrated Decentralisation Strategy**  
7 Key Development Areas (KDA) or Nodes have been created in ECER to ensure concentrated and optimal development. The Nodes were established to advance the rural-urban integration strategy for focused regional decentralisation. This has made it possible to conduct strategic, high-impact projects and programmes that are inclusive (ECERDC, 2017).

The Nodes also assisted in addressing one of the region's key challenges, specifically, luring in private investment, which will create new jobs and business prospects, raising household income

(Lim *et al.*, 2021). The development of the Nodes has also made it possible to focus government efforts on major economic activity and populations in the area (ECERDC, 2018).

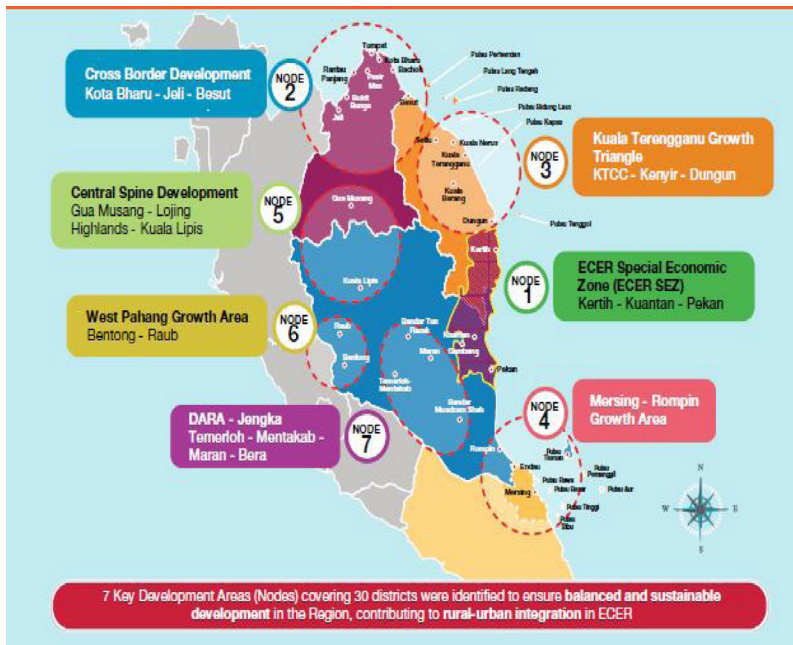


Figure 2. Concentrated decentralisation strategy to optimise resources and promote rural-urban integration

(Source: ECER Masterplan 2.0)

**Community Empowerment**

Several important economic clusters were the focus of various strategic projects and programmes detailed in the ECER Master Plan. Through providing jobs, business opportunities, and the influx of private cash, the projects and programmes were created to empower communities.

The ECER Masterplan identified five key economic drivers: manufacturing, agriculture, petrochemicals, tourism, and human capital development. The objectives of these economic drivers were to advance the economy through the value chain, add value to the area's resources, and increase ECER knowledge capacity (ECERDC, 2019b).

**Catalysing Rural-Urban and Regional Integration**

Creating an effective road transportation system is essential because it will increase mobility, which is important given the role that road transportation plays in ECER's socio-economic transition and acts as a more effective form of transportation for local businesses to prosper.

This has led to high-impact projects like the Central Spine Road and the Lebuhraya Pantai Timur (LPT) to enhance ECER's connectivity, speed up rural-urban integration, and increase accessibility to the rest of the nation.

The Lebuhraya Pantai Timur connects important cities and towns over 758 kilometres on the East Coast of Peninsular Malaysia. The Kuala Lumpur-Karak Expressway is extended by the Lebuhraya Pantai Timur and connects Peninsular Malaysia's West and East Coasts up to Kuala Terengganu at the moment (ECERDC, 2019b). The alignment will be extended further by Lebuhraya Pantai Timur 3 (LPT3) to Kelantan and Lebuhraya Pantai Timur 4 to Johor (LPT4) (ECERDC, 2019b).

There are further links being built for Kulim-Jeli, Simpang Pulai-Gua Musang-Kuala Berang-Kuala Terengganu, and Pasir Puteh-Tok Bali. Tasik Kenyir, Kuala Terengganu City Center (KTCC), and Hulu Terengganu's tourism potential will be further unlocked by the East-West Link, while Gua Musang's appeal to investors will increase due to the Pasir Puteh-Tok Bali Link's improved link with Tok Bali (ECERDC, 2019b).

In order to simplify the movement of people and commodities, bridge building will be done because it is recognised that better land connectivity is crucial for encouraging cross-border trade, particularly with neighbouring Thailand. These include the Palekbang Bridge, the Rantau Panjang-Golok Bridge, and the Pengkalan Kubor-Tak Bai Bridge in Kelantan (ECERDC, 2019a).

### **State of Kelantan**

Taking advantage of its proximity to Southern Thailand and the Indochina area, Kelantan is positioned as a cross-border gateway and major logistics hub for the North-East. With the public investments planned for Kelantan, the state is anticipated to draw an additional RM9.5 billion in private investment, producing 26,950 employment and 19,760 prospects for small businesses

(ECERDC, 2019b). The ECER Master Plan 2.0 prioritises manufacturing activities in addition to urban tourism, ecotourism, arts, culture, and heritage tourism to foster economic growth.

### **Spatial Framework**

Due to its advantageous location near Indochina and Southern Thailand, Kelantan is a great contender for Peninsular Malaysia's North-East Cross-Border Gateway and Logistic Center. In order to further promote economic growth in the state, ECER's Cross-Border Development includes 8 growth regions, each with its advantages and distinctive selling points.

In order to maintain the state's competitiveness, the government will prioritise Cross-Border Development plans, especially in light of Thailand's future ambitions for its transportation network and Special Economic Zones in its southern region. Therefore, to ensure that Malaysia, and Kelantan in particular, stay relevant in the regional trade scene, the government must take the appropriate actions to secure the first-mover advantage.

The government's investments in high-impact transportation infrastructure, such as the Central Spine Road, ECRL, Lebuhraya Pantai Timur 3 (LPT3), Tok Bali Port, and Sultan Ismail Petra Airport's designation as an international airport, which will enhance connectivity, are also contributing factors to the state's position while opening up new economic opportunities in Kelantan's hinterlands. As of April 2019, The Federal Government has begun steps to expedite these projects for Kelantan's development, including the new Pasir Puteh - Machang - Jeli route, Kota Bharu - Kuala Krai Highway and Palekbang Bridge.

The government's decision to approve the five projects follows the Third Pillar of the Mid-Term Review of the 11<sup>th</sup> Malaysia Plan (11MP). On March 7<sup>th</sup> 2019, the Minister of Economic Affairs announced that the Federal Government had approved an additional RM200 million for the state's development, making the total allocation

channelled to Kelantan through the 11MP Mid-Term Review of RM1.4 billion<sup>3</sup>. Other areas of growth and key economic activities to be carried out in Kelantan following ECER Master Plan 2.0 are summarised below: Similarly, Figure 4 depicts the growth areas and connectivity link in Kelantan.

Table 2: Growth Areas and Key Economic Activities in Kelantan

No.	Key Economic Activities	Growth Areas
1	Kota Bharu Conurbation (Districts of Kota Bharu & Tumpat)	Kota Bharu - Kota Bharu Regional Airport, Financial Service Centre and Tourism Centre for Art, Culture and Heritage (Kg Laut, Serambi Mekah and Kota Bharu town)
2	Halal Hub	Pasir Mas Halal Park featured as OEM Hub and Logistic Hub
3	Cross-Border Development (Jeli, Bukit Bunga and Rantau Panjang)	Bukit Bunga - IMT-GT Plaza
4	Tok Bali Conurbation (Manufacturing, Supply Base and Logistic Hub)	<ul style="list-style-type: none"> <li>• Tok Bali Port</li> <li>• Tok Bali Industrial Park</li> <li>• Tok Bali Integrated Fisheries Park</li> <li>• Transit-Oriented Development</li> </ul>
5	New Economic Catalyst Crossing - Tanah Merah, Kuala Krai and Machang	<ul style="list-style-type: none"> <li>• Manufacturing</li> <li>• Tourism</li> <li>• Industrial Minerals</li> </ul>
6	Gua Musang Conurbation	<ul style="list-style-type: none"> <li>• Industrial Park</li> <li>• Downstream - Industrial Mineral</li> <li>• Ecotourism</li> <li>• Agribusiness</li> </ul>
7	Lojing Highlands	<ul style="list-style-type: none"> <li>• Integrated Tourism</li> <li>• Highland Agriculture</li> </ul>
8	Stong Green Tourism	<ul style="list-style-type: none"> <li>• Stong State Park</li> <li>• Ecotourism</li> </ul>

(Source: ECER Master Plan 2.0)

<sup>3</sup>Retrieved through: <https://www.bharian.com.my/berita/nasional/2019/04/554143/pelaksanaan-5-projek-utama-di-kelantan-bermula> (accessed on 10th May 2022)



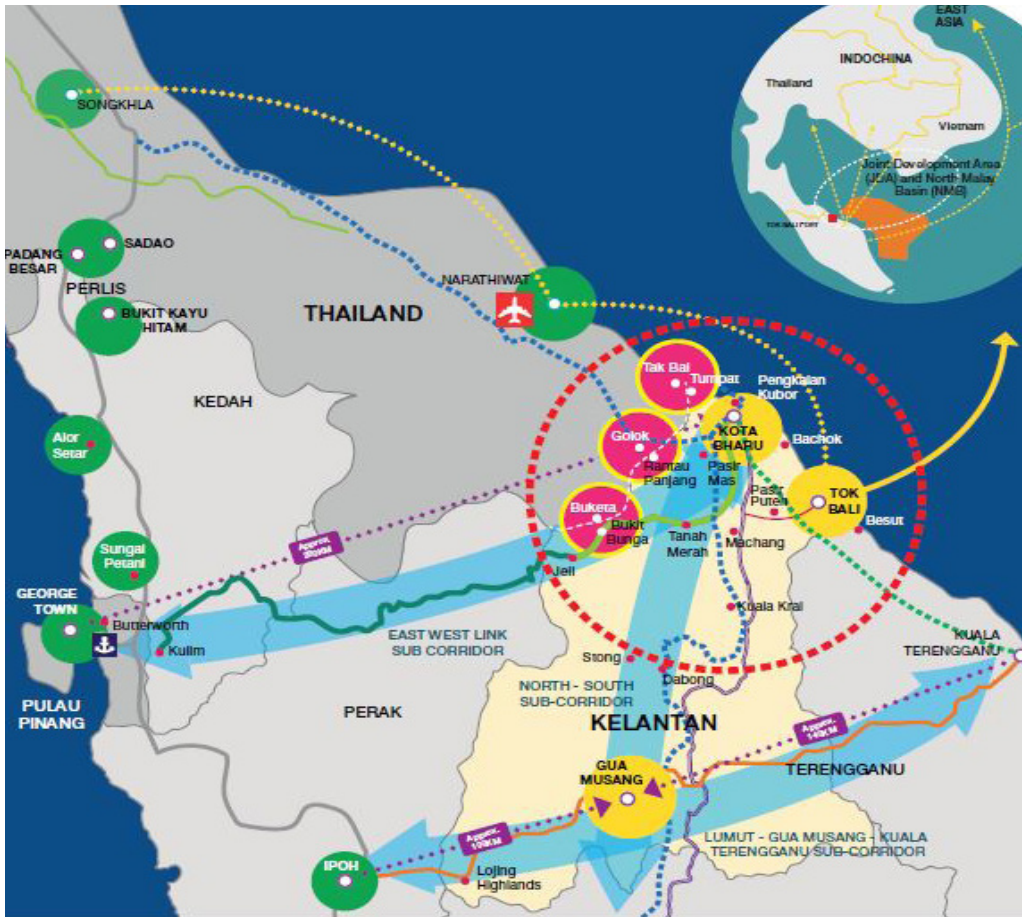


Figure 3. The growth areas and connectivity link in Kelantan  
(Source: ECER Master Plan 2.0)

**Palebang Bridge, Kelantan**

Palebang Bridge is a project that will connect Kota Bharu and Palebang, Tumpat. It is one of the important infrastructure initiatives the federal government has approved and will implement in Kelantan. ECERDC studies in the Kota Bharu City Center Master Plan (KBCC) found the critical bridge to development after considering two factors: congestion at the Sultan Yahya Petra Bridge and limited growth around Kota Bharu city centre (ECERDC, 2021).

The proposed site spans 86 acres (34.86 hectares) and include 77 lots, with construction expected to take 32 months (ECERDC, 2021). Currently, most land uses are agricultural, consisting of paddy crops and orchards (Jamal *et al.*, 2014). There are also existing residential land use activities on the proposed site, such as village houses and commercials. The types of land involved in the bridge project are shown in Table 3.

Table 3: Type of Land Involved in Bridge Project

Type of Land	Area (Hectare)	Percentage (%)
Residential Area	2.86	8.12
Commercial Area	0.59	1.69
Institutions and Community Facilities	0.44	1.29
Open Land	0.55	1.57
Transportation Land	1.32	3.81
Agricultural Land	24.15	69.3
Vacant Land	3.19	9.15
Body of Water	1.76	5.07
Total Area	34.86	100

(Source: ECER Development Council, 2021)

The development analysis on drainage, on the other hand, shows that the Palekbang Bridge will cross three rivers: Sungai Kelantan, Sungai Pengkalan Chepa, and Sungai Mak Neralang. As a result, the following settlement areas have been identified as potentially impacted by the development of the Palekbang Bridge:

- a) Kampung Pauh Kubor
- b) Kampung Tanjung Chat
- c) Kampung Banggol
- d) Kampung Laut
- e) Kampung Penambang
- f) Kampung Kepulauan
- g) Kampung Banggol

The bridge construction is expected to ease the movement of goods and visitors by emphasising the value of improved land connection in fostering cross-border trade, notably with Thailand's neighbours. In general, the construction is expected to alleviate traffic congestion on the Sultan

Yahya Petra Bridge and throughout the city of Kota Bharu. Aside from that, it will serve as an alternative route to connect Tumpat and Pasir Mas in the west, adjacent to Thailand's southern border, to Bachok and Pasir Puteh in the east of the Kelantan River. The bridge construction is expected to improve local access, increasing the mobility of citizens and goods while also stimulating cross-border trade.

Once completed, this project will catalyse the growth and prosperity of Palekbang as a new attraction in Kelantan while realising urban expansion efforts around Kota Bharu and supporting the growth of nearby areas such as Kampung Laut and Pasir Pekan.

#### **Role of Other Stakeholders**

In order to complete the Palekbang Bridge, ECERDC has worked closely with the Federal Government and the Kelantan State Government. Those involved include the following:

Table 4: Stakeholders Involved in the Development of Palekbang Bridge

Federal Agencies		
1	Prime Minister's Department (JPM)	To ensure that this project can be carried out according to the time and allocation that has been set
2	Department of the Director General of Lands & Mineral	Assist in matters related to land acquisition
3	Department of Irrigation and Drainage (Federal)	Assist in matters relating to drainage and drainage
4	Ministry of Works	Assist in matters relating to road construction

**State Agencies**

1	Economy Planning Unit Kelantan	Assist in launching the necessary approval process for this project
2	PLAN Malaysia Kelantan	Assist in approving Planning Permission for this project
3	Kota Bharu Municipal Council Islamic City	Assist in launching the necessary approval process for this project
4	Tumpat District Council	Assist in launching the necessary approval process for this project
5	Lands & Mineral Office Kelantan	Assist in matters related to land acquisition

(Source: ECER Development Council, 2021)

Generally, the construction of the bridge is divided into two phases. The first phase connects the Tumpat District to the Kota Bharu District via Jalan Pantai Cahaya Bulan, while the second phase connects Jalan Pantai Cahaya Bulan to Kampung Tanjung Chat. The line connects Jalan

Palekbang to Kampung Laut. The total proposed length of the road and bridge are estimated at 2.71 km, with the length of the bridge structure estimated at 1.29 km (ECERDC, n.d.). Figure 4 shows the layout plan of the bridge.



Figure 4. The layout plan of Palekbang Bridge

(Source: ECER Development Council, 2021)

**Economic and Societal Impact**

The proposed Palekbang Bridge is one of the projects that shall be implemented through the Kota Bharu City Center Masterplan (KBCC). The initiative came to light due to incessant congestion at Sultan Yahya Petra Bridge, as an alternative route between Tumpat and Pasir Mas in the western part of Kelantan, to improve connectivity and accessibility for locals

and act as a catalyst for development in Wakaf Bharu and Tumpat. Hence, creating new development opportunities and expanding the functionality of Kota Bharu -Tumpat municipal areas. A study<sup>4</sup> shows the expected congestion of traffic in 2030. Without Palekbang Bridge, the situation at Sultan Yahya Petra Bridge and Tendong Bridge would be much worse in the coming years. Table 4 simplified the forecast.

Table 5: Expected Traffic in 2030

Option	Palekbang Bridge			Sultan Yahya Petra Bridge			Tendong Bridge		
	East Bound	West Bound	Total	East Bound	West Bound	Total	East Bound	West Bound	Total
Without Palekbang Bridge	-	-	-	56,479	60,992	117,401	12,085	11,665	23,750
With Palekbang Bridge	23,312	26,559	49,871	37,648	40,044	77,692	7,534	7,413	14,947

(Source: ECER Development Council, 2021)

With the upcoming development of the Palekbang Bridge, it is anticipated for traffic congestion at the Sultan Yahya Petra Bridge will be reduced from the existing daily traffic of 117,401 vehicles to 77,692 vehicles (a reduction of 39,709 vehicles or 33.8%). This will improve the use of the Sultan Yahya Petra Bridge from Level of Service F to Level of Service E.<sup>5</sup>

At the same time, the bridge will act as an icon, spur the growth of tourism activities and create an attraction spot along the Kelantan River Coast (Kota Bharu Promenade).

Based on Rancangan Tempatan Daerah (*Local District Plan*) Tumpat 2020, Kampung Laut will be grouped as a cluster of food and agro-based industries for small and medium enterprises such as *serunding* and *dodol*, while Kampung Palekbang will be grouped as a cluster of silver craft, weaving and *batik* industries. Apart from that, the redevelopment of Kampung Laut and the development of the Kota Bharu/Tumpat Promenade, which will be fully completed in 2025, will also serve as a tourist attraction in the area.

<sup>4</sup>ECER Development Council, 2021

<sup>5</sup>Palekbang-Kota Bharu Bridge Traffic Impact Report

## Conclusion

Malaysia's East Coast is an area with a unique culture, immense natural resources, and many opportunities. This has motivated the government to develop the region further. The establishment of ECERDC is expected to transform the socio-economic landscape by implementing various high-impact and catalytic projects.

One of them is the proposed Palekbang Bridge development, which is expected to create a "ripple of development trends" in the Tumpat and Kota Bharu districts. Once completed, the bridge will relieve congestion at the Sultan Yahya Petra Bridge, serve as an alternative route between Tumpat and Pasir Mas in western Kelantan, improve connectivity and accessibility for locals, and serve as a catalyst for development in Wakaf Bharu and Tumpat. In other words, it provides physical, economic, and social benefits to citizens and local governments.

The construction of the Palekbang Bridge is also in line with the Federal Government's plan to build major infrastructure projects for the people, particularly on the East Coast. The geographical location and bustling activities in the surrounding area indicate that the development will become an appealing and profitable investment in the near future. Furthermore, last-mile connectivity for goods and services will be improved, stimulating trade, increasing business efficiency and stimulating economic growth in all economic sectors.

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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