

ISSN: 0853-9251 (p) and 2527-628X (e)
 Pengecekan dengan *Software* Turnitin
 DOI: <http://dx.doi.org/10.17977/um017v25i12020p039>

Kajian, Teori, dan Praktik dalam Bidang
 Pendidikan dan Ilmu Geografi
 Volume 25, Nomor 1, Jan 2020
 Halaman: 39-53

Indonesia's maritime strategy facing The Kra Isthmus Canal agenda

Fika Monika*, M. Baiquni**, M. Pramono Hadi***

* Program Studi Doktor Geografi, Fakultas Geografi, Universitas Gadjah Mada, Yogyakarta, Indonesia

** Program Studi Pengembangan Wilayah, Fakultas Geografi, Universitas Gadjah Mada, Yogyakarta, Indonesia

*** Program Studi Geografi dan Ilmu Lingkungan, Fakultas Geografi, Universitas Gadjah Mada, Yogyakarta, Indonesia

INFO ARTIKEL

Riwayat Artikel:

Dikirim: 22-4-2019

Disetujui: 21-8-2019

Diterbitkan: 30-1-2020

Kata kunci:

The Kra Isthmus Canal,
 Malacca Straits, Indonesia,
 Maritime Connectivity

ABSTRAK

This research will comprehensively analyze the Kra Isthmus Canal's agenda and its possible impacts on Thailand and also to some other countries in ASEAN, specifically for Indonesia. By employing descriptive and qualitative methods, this study will investigate two types of paradigm through documentation and literature review from several studies in the past. The results are expected to encourage Indonesia to be more agile in adjusting steps to become the world's maritime fulcrum and also to sharpen the state sovereignty in sea policy.

Penelitian ini secara komprehensif akan mengkaji rencana pembangunan Terusan Kra Isthmus serta dampaknya terhadap Thailand dan juga beberapa negara lain di wilayah ASEAN, khususnya Indonesia. Studi ini mengeksplorasi dua jenis paradigma melalui pengumpulan dokumentasi dan kajian pustaka dari beberapa penelitian sebelumnya. Hasil dari kajian diharapkan membantu Indonesia agar lebih cerdas dalam mempersiapkan langkah untuk menjadi poros maritim dunia, dan menajamkan kebijakan laut nasional yang berdaulat.

This is an open access article under the CC-BY-SA license



Correspondence Author:

Fika Monika

Program Studi Doktor Geografi

Universitas Gadjah Mada

Bulaksumur, Depok, Sleman, D.I. Yogyakarta 55821

E-mail: fika.monika@mail.ugm.ac.id

INTRODUCTION

Indonesia has been longing to become the world's maritime fulcrum. This aspiration is intimately related to the fact that Indonesia is geographically strategic; surrounded by two giant continental blocks and two vast oceans. The oceans and seas along the archipelago are remarkably astonishing, constitute many legitimate commercial shipping routes both on international (north-south) and domestic (east-west) levels. Indonesia's goals since then well sharpened with the geopolitical paradigm known as the Indonesian Archipelago Concept. This vital principle has long been set as the basis of maritime foundation in order to become a robust nation. However, the apparent challenges of geo-maritime in the state sectors are immensely dynamics.

The international shipping industry network that crosses territorial seas connecting countries has long devised competitions and conflicts; they are acknowledged

as capable of maturing Indonesia's vision as the world's maritime fulcrum. For a simple instance, the Kra Isthmus Canal's agenda in Thailand. This Canal is an actual geopolitical subject and is regarded as a definite challenge. Concerning the advantages of streamlined routes, the Canal could propose better performance in terms of time, security, and budget efficiency. Mainland Thailand and its Gulf, the Andaman Sea, and the Straits of Malacca are situated between two vast spaces of oceans. If the agenda was turning out into real, this specific path is believed to be a vocal crossing track for international shipping industry together with the Malacca Straits, primarily in the Southeast Asia region (Saragih, 2018).

For decades, the South China Sea is the leading transaction pathway of necessary logistics for manufacturing countries to and from West Asia, East Asia, and Southeast Asia. Several nations in Africa (Nigeria and Angola) are the largest exporters for many materials in the gas and energy sectors accompanied by the Middle East, which has long been a significant supplier and always still. Roughly a third of imports into Asia are liquefied natural gasses; Japan consumes crude oil by 80%, and 40% of total Chinese intake of crude oil is laid on hands by import activities (Karagiannis, 2010). The safety level of the shipping activities in the Indian Ocean region is forecasted to increase and further trouble the status of the Malacca Straits. Besides, the South China Sea controversy triggers many countries to find a new alternative pathway for better logistics connectivity. By all means, the Kra Isthmus Canal is a fierce contestant for the Straits of Malacca.

METHODOLOGY

This study analyzes secondary data by collecting literature reviews and some other supporting documents. Descriptive and qualitative methods are employed to study the geo-maritime side of the Kra Isthmus Canal and Indonesia's maritime routes. This research will highlight and complement preceding studies by focusing on two geo-maritime aspects: socio-economic and maritime global constellation.

Besides focusing on the Canal's impact towards Indonesia's economy and marine policy, this research will also examine its correlation to several countries in the ASEAN region such as Malaysia, Myanmar, Laos, Singapore, and Vietnam. Therefore, by analyzing the Canal's agenda in the future, the outcome is expected to comprehend and observe on how Indonesia's maritime fulcrum concept would answer future maritime globalization.

LITERATURE REVIEW

The geo-maritime paradigm was first introduced in 2015 by the Indonesian Geography Association (IGA). At the same moment, the maritime concept also became the attention on the international stage. The geo-maritime paradigm in a geographic perspective emphasizes six objects: (1) historical maritime, (2) maritime resources, (3) socio-economic maritime, (4) maritime culture, (5) geo-literation for maritime values, and (6) maritime global constellation. Germond (2014), defined four concepts in maritime security: human resilience, marine safety, sea power, and blue economy. By having an in-depth examination, the geo-maritime paradigms from a geographical perspective (IGA) have an ongoing direct connection with Germond's theory.

Many earlier researchers have delivered individual/group studies or such literature investigations related to the Kra Isthmus Canal. Some of them focused on evaluating distinct impacts on different countries. A study conducted by Rahman et al. (2016), presented shipping industry patterns in Malaysia. Later, Harahap (2019), reported

how the Kra Isthmus Canal affect Indonesia's economy. Earlier, Sulong (2012), discussed how the Kra Isthmus Canal affect international relations in Southeast Asia territory, including Indonesia. Meanwhile, from the spatial analysis purview, Chen and Kumagai (2016), conducted research using modeling techniques. The technique was making a simulation linked to economic impacts through the concepts and approaches from the spatial program (remote sensing technology). The research was supported by the Institute of the Japan External Trade Organization and was fascinating as it can predict the business and economics circumstances with a designated timeframe in the future.

In the view of Harahap (2019), apart from the adverse impacts that might arise due to the Canal's idea, Indonesia also has a chance to look for real opportunities if several ports in crucial areas were being optimized. For example, the Sabang Port in the Special Region of Aceh and the Kuala Tanjung Port in North Sumatra. If the two harbors were transformed into international-standard ports, their capacity and capability would be able to handle foreign vessels' loading and unloading. Those harbors can be Indonesia's imperative hub-spots and become ardent rivals to Singapore Port's triumphant.

RESULTS AND DISCUSSION

Geo-maritime Elements on the Kra Isthmus Canal

The signature of the Kra Isthmus Canal is not a novelty; this design element has been popularized for around 200 years, precisely during the triumph, power, and control of the Rattanakosin Kingdom in 1782-1932. Masters and the Thai community have already addressed the Canal's design, yet the government did not have a project's ultimate decision, and the agenda was reported being succumbed and emerged simultaneously. During the financial crisis knocked Asia from 1997 to 1998, authorities in several nations tried to give resolution through various strategies and ideas for an immediate recovery, including the Thai government (Menon, 2018).

In 1999, Nippon conducted a study by calculating the Canal's scheme; they assumed that ± \$20 billion were demanded to perform the construction entirety (not including maintenance). Also, by a length of ± 32 miles, this track can cause sovereignty obstacles as it could separate several provinces in Northern Thailand and Southern Thailand. Even though the estimated capital was considerably high, the issue to give birth towards the Canal strongly emerged around the period of the 1990s. The dignitaries hoped that this giant infrastructure would support internal economic enthusiasm within the country (Billington, 2017).

According to Sulong (2012), when Thaksin Shinawatra governed, the program to bring a breath unto project failed even though he possessed an emphatic answer from assembly officials; this happened due to internal problems in the legislative body of government (civil and non-civil). Later, after the disclosure for a prime minister came out, a change began with the advancement of Yingluck. The wind of revolution over the Canal performed an echo among the Thai country executives entirely in 2011.

Five years later, under the influence of Prayut Chan-O-Cha, problems reappeared, and the project's agenda back into faded. Still, in 2016, someone represented the royal committee submitted an opinion about the route's formation. In response to this request, via Lt-Gen Sansern Kaewkamnerd, the government affirmed that the Kra Isthmus Canal was not a strategic expansion for Thailand's virtue (Channel News Asia, 2018). Therefore, the response implied that all of the expectations of the Canal's project did not have an audible constitutional basis by the Thai government. However, when Prem Tinsulanonda served as Prime Minister in the previous order (1941–1986), several

members of the Thai Council welcomed the agenda, and Vajiralongkorn (the King) also seemed to provide the same provision. Hence, even though Prayut Chan-O-Cha has now asserted to not continue this project during his tenure, with unhesitant support from the Royal, anything could be possible to happen (Billington, 2017).

As given in the following Figure 1, the Canal's master plan can be a timesaver from the Andaman Sea in the Indian Ocean region to the South China Sea (or vice versa). This path can be reached without turning to the south towards Singapore/through the South Malacca Straits as it is now happening habitually.

lokal wilayah dari masyarakat menjadi *input* dan dimasukkan ke dalam peta. Partisipasi masyarakat dalam pembuatan peta juga mampu mendorong kemandirian penduduk dalam peran sertanya merencanakan pembangunan wilayah yang dituangkan dalam peta (Kadir W. dan Jusuf, 2008). Kontrol terhadap pembuatan peta berbasis partisipasi dan penggunaan peta dilakukan oleh masyarakat/stakeholder secara langsung. Aplikasi dari pembuatan peta partisipatif cukup beragam dan dapat disesuaikan dengan tema-tema yang dipilih untuk dituangkan dalam peta partisipatif. Salah satu aplikasi dari pembuatan peta partisipatif adalah peta potensi wisata berbasis partisipasi masyarakat untuk pengembangan wisata pada satu daerah.

Maritime Socio-economic

The function of the Canal is believed to ignite Thailand's potential as a core for mobilization and various logistics industries in Southeast Asia. This sophisticated infrastructure could strengthen bilateral and multilateral collaboration with incomparably higher profits among ASEAN countries. According to a development analysis specialist, Pakdee Tanapura, the prompt growth of industry and business could be accelerated by functioning the Canal (ASEAN Affairs Magazine, 2009). Every dependable maritime mobility can undoubtedly have a meaningful impact. If the Canal progressed maritime venture in a concentrated area, later the business and commerce would also come to alive. Apart from the advantages that would be gained by Thailand, some other positive



Figure 1. The Kra Isthmus Canal Route (Source: National Planning Agency)

impressions would also be absorbed by countries such as Cambodia, Laos, Vietnam, and Myanmar (Sulong, 2012).

In contrast with the maritime pursuits that can trigger economic betterment, Thailand has long had sovereignty dilemmas. Some parties in the government's body have doubts about the Canal's future. If this development split the two parts of the country geographically (which would be established across Satun Province and Songkhla Province), the probability for Southern Thailand to be officially self-governing would be even higher. This anxiety is further reinforced by proof since 1948 when Southern Thailand has long had a struggle for seceding, known as South Thailand Insurgency. The rebellion happened because of claims that provinces in Southern Thailand such as Songkhla, Pattani, Yala, and Narathiwat lived just like Thai's half-blood.

Also, some half-truth talks stated that several Muslim nations desire to interrupt Thailand and support new sovereignty for Southern Thai, and these hearsays circulated among the country for ages. However, many parties also had optimism. They assumed that the intimidation of separatism movement could be resolved efficiently with the accomplishment of the Canal; hence, proper development and high social welfare would have the power to address Thai society expectation (Kinder, 2008).

In addition to Thailand's constitutional provocations, the hardships undergone to establish the Kra Isthmus Canal are also due to the lack of transparency. Society and government have no idea about the investors who participated in the outline. For example, the titles of several large companies, Liu Gong Group Limited Company, Xuzhou Construction Machinery Group, and Sany Heavy Industry Limited Company had grown into the public and government conversations. However, the news just vanished along with those exceptional companies' fame (Lau & Lee, 2016).

In defending some doubtful news, in 2017, a fresh breeze emerged due to a series of meetings by group members of the socio-cultural-economic from China and Thailand together with the group of European Business, Economy, and Trade. This association raised a formation of the Canal's dormant project. The meeting was then continued in 2018. Historically said that the construction of the Canal was also supported by spirits of Chinese Silk Road's new life. Through a group of people associated with the Isthmus Canal Organization for Thailand, they were trying to make new attempts to bring back the Canal's life. According to some statements, this pathway construction is predicted to be completed in 10 years and yet is expected to yield huge earnings. China, as one of the superpower countries in Asia, is reportedly ready to become the front supporter in terms of financial and infrastructure resources (Menon, 2018).

Maritime Global Constellation

The global scale mobility and economic transaction usually use vast ocean's routes for swarming the business, and the Atlantic has long been matured as the transcendent marketplace. However, due to the trend changes in the global industrial system, the Pacific Ocean, the most massive one in the world, culminated as the center of the 21st-century global maritime economy.

According to Menon (2018), the Canal's agenda was classified into two outlines. The first part is called as the 'Malacca Dilemma'; this path is a quick shortcut from the Andaman Sea in the northern part of Sumatra Island to the South China Sea (vice versa). Up until now, around three-quarters of oil consumption by China is purchased annually through the Straits of Malacca. As the Canal has the potential to offer many efficiencies, this track would also be instrumental in breaking the bustle of logistics transportation in Southeast Asia. Therefore, these delightful promises have motivated several large companies in China to ease the Canal's realization.

The second part is designated as the Special Economic Zones (SEZ). The SEZ purposes for maximizing the economic standing in a concentrated region, and the economy would be more stable and sustainable with full support in physical facilities. Considering the Canal would be becoming a center of business traffic toward countries from various parts of the world, implying that this Canal must have an extra advanced infrastructure in order to support the business activities as the hub-ports (Menon, 2018).

Chen and Kumagai (2016), made a simulation by using spatial economics as a parameter. The two Japanese researchers succeeded in presenting a formulation that was qualified to predict the economic situation in several regions surrounding the Canal. The study set three designs, as follows:

Design-1: the Kra Isthmus Canal and the Straits of Malacca; both are functioning;

Design-2: the Kra Isthmus Canal; is functioning alone;

Design-3: the Kra Isthmus Canal, the SEZ, and the Straits of Malacca; all three are functioning.

The time estimation to complete this route was per 2025. In making predictions related to economic conditions, the designed of 2030 and the Gross Domestic Product (GDP) were selected as indicators, as shown in Table 1.

From the above table, several countries represent various continents. As in the designs run by the program, East Asia was a particular region that would have received the most significant benefits. As shown in design-1, two dominant countries, Japan and China, are the leading performers. Profit amounted to \$21.5 billion is predicted to be achieved by China, then more to the east, the worth of \$10.6 billion would cruise to Japan.

The doubled-interest that might be collected by China is based on many forces, more to the point is concerning security status. Presently, the Malacca Straits is the only business route adored by most countries yet also contains various perils. Usually, threats often target countries with weak security systems, but everything can happen in the Malacca Straits (theft, accident, and the logistical stoppage). Such miserable track records in the Malacca Straits execute China to be very eager in proposing the Kra Isthmus Canal.

Table 1. Economics Impact by 2030

Countries	Design-1		Design-2		Design-3	
	Million \$	% of GDP	Mil- lion \$	% of GDP	Million \$	% of GDP
China	21508	0,13	17549	0,11	20685	0,13
Japan	10611	0,08	9212	0,07	10273	0,08
Korea	3405	0,11	3116	0,10	3219	0,11
Taiwan	897	0,08	834	0,08	863	0,08
∑ East Asia	36421		30711		35040	
India	17719	0,22	17996	0,22	17827	0,22
Australia	-250	-0,01	-1208	-0,07	-234	-0,01
Europe	23431	0,07	23370	0,07	21252	0,07
The USA	-4751	-0,01	-5355	-0,01	-4199	-0,01

Source: Chen and Kumagai (2016)

A scholar, Zhao Yuncheng, also approve some concerns regarding the importance of security in the Malacca Straits. He stated that if the situation at sea remained to be increasingly unfavorable, the mobilization of crude oil which regularly imported by China would receive significant intimidation. When Hu Jintao served as President of the People's Republic of China in 2003-2013, he was also striving to accelerate maritime security so that sovereignty and a stable economy could be settled in his command. China had assumed that some interlopers had a goal to disrupt these aspirations, those who intentionally wanted to control the commerce atmosphere in the Indian Ocean (one of which was the United States).

In 2013, right under the authority of Xi Jinping, China had a new policy called "One Belt One Road". This policy seeks to turn on activities that can elevate Chinese sovereignty in a more stable direction as an influential country. There are various infrastructure development projects: the air force, army, and navy. The projects were aggressively assembled and spread throughout diverse regions within the motherland proportionally. This policy exclusively focuses on the advancement of China's intention to increase prosperity internally. Various foundations were built such as the Economic Belt of the Silk Road (to facilitate mobility towards East Asia, Central Asia, and Southeast Asia) and diplomatic sea lanes (to facilitate mobility to Africa, Europe, Persia, and Australia). Seeing from the expansion demonstrated by China, the Canal might be able to contribute positive impacts significantly. This pathway might become one of the legitimate methods for China to be more attached to its target market efficiently. (Menon, 2018)

Comparable to China, two developed countries who lead technology in the international shipping industry, Japan and Korea, also perceive a beneficial impact that the Canal can offer. In the industrial and technological world, time and cost efficiencies are a component and determinant of business prosperity. If a lot of time and costs were spent on the production cost, then the profit might encounter a deficiency. Therefore, as much as \$300,000/shipper journey can be cut by Japan without turning around the Malacca Straits; so that the presence of a more promising alternative route is deemed necessary. By understanding these immense savings, in the mid-1990s, Phuket Pass Project Limited received an investment for conducting a research project. The project was subsidized by several Japanese companies as a symbol of enthusiasm related to the Canal's topics (Kinder, 2008).

Impact on ASEAN Countries

Quoted from ASEAN Affairs Magazine (2009), a historian and also a books' contributor, Geoff Wade, stated that Geopolitics in ASEAN would be under the control of countries who possess dominant power. They would compete to increase expansion, maximize new pathways, and utilize all resources deemed as propitious.

Furthermore, through the research outcomes conducted by Chen and Kumagai (2016), those who are predicted to receive significant advantages would surely show positive support exponentially. By the Canal, current mileage would be replaced by a shortcut as alternative access. The highest efficiency of mileage might benefit various port destinations from the European region to the South China Sea (vice versa), the distance can be cut up to 808 miles. Next in sequence is the crossing track for the European region and the Andaman Sea to East Asia (vice versa), which can be reached with 560 miles shorter. Lastly, the vessels' travel time can be eliminated up to 435 miles to and from the Manila region, the Andaman Sea, and Europe. Meanwhile, either by the Canal's presence or absence, this utopian would not affect Indonesia's shipping lane system in terms of time and distance efficiency.

Table 2. The Element Comparison between the Malacca Straits and the Kra Isthmus Canal

Elements	The Malacca Straits	The Kra Isthmus Canal
Distance	± 464 miles longer	± 464 miles shorter
Time	Up to five days delayed	Could save up to five days
Security	Low	Chance of rising Thailand separatist aggression
Cost	Less economical	Could save up to ± \$350,000
Level of activity	Overcrowded	No data available (could be a new alternative to replace the Straits of Malacca)
Investment as-pects	Restricted (limited)	Unrestricted (open)
Accident track record	High	Can be a new option to lessen collisions in the Malacca Straits
Dimension coverage	± 500 miles of length, ± 40-155 miles of width, 44 yards of depth	Two passages, ± 63 miles of length, ± 437 yards of width and ± 27 yards of depth
Elements	The Malacca Straits	The Kra Isthmus Canal
Pollution	High	Will harm the marine ecosystem due to excavation activity
Coverage area	In three countries (Malaysia, Indonesia, and Singapore)	Full in Thai supremacy.
Vessels coverage	Adjusted to the area of the Malacca Straits	Ultra Large Crude Carrier (ULCC)

Source: Rahman et al. (2016)

The straits situated in several countries such as Indonesia, Malaysia, and Singapore have been the primary access for maritime transportation in the Southeast Asia region. The Malacca Straits entrance exposes various commercial activities to and from Southeast Asia and East Asia regions and also bridges the South China Sea, Andaman Sea, Pacific Ocean, and the Indian Ocean. For ages, besides passing Malacca Straits, oil and other vital commodities also transported through the Lombok Straits and the Sunda Straits. Considering that sea mobilization is one of the most favorable access for most countries, cross-border security, accessibility, and convenience aspects should have infinite attention among neighboring countries (Ho, 2006).

In the present, every shipping from the East Asia region to the Indian Ocean typically has to turn around/stop by Singapore. However, if the Kra Isthmus Canal existed in the world, this path would indirectly defeat the busy vessels' movement in the Southeast Asia region. As a result of this transmutation, the activities of several great nations such as the United States, China, and India would experience territories fluctuations; they have to strive more for power and influence in the economic, social, cultural, and political battlegrounds (Sulong, 2012).

Following are the research's results conducted by Chen and Kumagai (2016), it appears that a few of ASEAN countries would gain benefit through the design-1 and design-3 significantly. In contrast, many countries in the design-2 would experience setbacks but Thailand.

Countries in the Malacca Straits

Still pointing to Table 3 above, Singapore might bear losses up to \$371 million if the design-1 was implemented. At the same time, Malaysia, and Brunei would also experience a loss of \$130 million and \$9 million respectively. As explained earlier, the

Table 3. The Economics Impact in Southeast Asia by 2030

Countries	Design-1		Design-2		Design-3	
	Million \$	% GDP	Million \$	% GDP	Million \$	% GDP
Indonesia	-98	0	-11660	-0,33	-83	0
Malaysia	-130	-0,01	-2029	-0,21	-85	-0,01
Singapore	-371	-0,04	-7027	-0,83	-353	-0,04
Thailand	2703	0,18	2742	0,18	4244	0,28
The Philippines	382	0,04	359	0,03	389	0,04
Brunei	-9	-0,04	-111	-0,51	-8	-0,04
Cambodia	8	0,02	9	0,02	9	0,02
Laos	2	0,01	2	0,01	2	0,01
Myanmar	9	0,01	9	0,01	9	0,01
Vietnam	484	0,09	486	0,09	491	0,09
∑ ASEAN 10	2980	0,03	-17.221	-0,20	4615	0,05

Source: Chen and Kumagai (2016)

Malacca Straits is a gateway and helping various countries in Southeast Asia to get international trade exposures, so it was also told to have high impacts for Indonesia. If the design-2 was applied, a loss amounted to \$11.7 billion would frighten Indonesia due to the Malacca Straits inactivity. Still, in design-2, Singapore and Malaysia would also suffer huge losses, each totaling \$7.1 billion and \$2.1 billion. Then in design-3, Singapore will suffer the most losses amounting to \$353 million compared to other countries in ASEAN, followed by Malaysia and Indonesia, amounted to \$85 million and \$83 million respectively.

From a study conducted by Rahman et al. (2016), the behavior of the Canal would later have two faces towards Malaysia, especially on social and economic aspects. At present, Malaysia has three main ports for driving their maritime economy, the Klang Port, Johor Port, and Tanjung Pelepas Port. In case the Kra Isthmus Canal was functioning, vessels traffic in the Malacca Straits could be decreased. Reducing the number of vessels passing around could reduce the loading and unloading intensity of numerous logistics. The accumulation of these difficulties might result in the weakening of Malaysia's socio-economic, and a high rate of unemployment might occur due to low job opportunities in the ports area. However, one port occupied by Malaysia still has optimism, the Port of Penang which is directly adjacent to the Malacca Straits gate; and is expected to become Malaysia's main port for facing the international sea revolution in the present and the future.

In the meantime, there has been no explicit legislative brushoff from some of Thailand's neighboring countries (Indonesia and Malaysia) concerning the Kra Isthmus Canal. However, Singapore gives natural defense as they have long been performing as the center of various international shipping industries. The presence of new contender in the port lane sector is predicted to threaten the level of logistics transactions that have been circulating in the Malacca Straits, specifically for Singapore. Supported by a very strategic location, this country is a very active international-scale transit spot for both air

and sea transportation. The threat by a new alternative route could have a substantial and permanent unwanted impact if Singapore does not adapt promptly. As a country with an area approximately 278 square miles, Port of Singapore is well known as the second busiest port in the world after the Port of Shanghai. Therefore, the economic life of this "lion country" is very dependent on cross-sea trading activities.

The reason that relies upon the Canal is not merely on the budget and time efficiency but also security. Several countries who support the system of the Kra Isthmus Canal used speculation concerning security dilemmas. On the other hand, Indonesia, Malaysia, and Singapore have arguments corresponding all of those understatements. As a group of countries who frequently has a multilateral partnership, these countries have evidence through the "Straits of Malacca Coordinated Patrols" for sounding that the Malacca Straits security is getting more reliable.

Mainland Indochina Countries

According to Boot (2012), connections between developing countries in mainland Indochina had never been separated from constant intercommunications and synergies in all courses. Businesses that are usually transported in Southeast Asia must undeviatingly intersect the surrounding neighbors. For a simple instance, Vietnam; if Vietnam desires to do business with Myanmar, these two countries must first travel encompassing Singapore and voluntarily arriving into contact with Indonesia and Malaysia.

However, if the Kra Isthmus Canal were functioning, this practice would no longer be legitimate. The ambition to accelerate the advancement of coastal cities is revealed by Myanmar and Thailand's efforts related to international port development proposals in Dawei, Tanintharyi. Therefore, the foundation of the Kra Isthmus Canal would be indirectly linear with Myanmar's government purposes to more actively hasten the germination of integrated economic zones (BBC News Asia-Pacific, 2011).

Similarly, Vietnam's neighbor who is also consolidated in the Indochina mainland, Laos—is currently progressing in the international shipping industry, and is predicted to gain success in the arena of international trade. Because of being flanked by Thailand and Vietnam, this setting lets Laos not to have an entire sea route. Thailand and Laos have a high socio-economic kinship and also sea contract (exports and imports). Consequently, Thailand would be very bustling when the Kra Isthmus Canal was functioning, and Laos would also hold a meaningful breakthrough in various sectors (Kinder, 2008).

Impact on Indonesia

Technically speaking, the Canal's behavior is considered to have crucial impacts both positively and negatively. In response to this matter, Indonesia was not risking and submissive, yet trying to set endurance to face any possible contemporary chaotic in the modern maritime revolution. Under the authority of President Joko Widodo, Indonesia has possessed Law Number 16 of 2017 concerning Maritime Policy. This policy aims to strengthen the principle of Indonesia as the world's maritime fulcrum. Today, the application of the maritime fulcrum concept is not yet excellently established; it can be seen as the development orientation in the shipping industry is still dominantly concentrated on the national level. Some commentators of international policy perceive that sea toll plan for reducing uneven developments is an "inward-looking" only (Negara & Das, 2017).

At present, the 'sea toll' is one of the most intensified progress in Indonesia's development, and is expected to connect various major destinations from the western edges to the eastern borders. Development that is still being centered on a local scale

becomes a shred of evidence that inequitable distribution existed in industry and transportation sectors continuously. Also, some parties under the president's administration expressed misgivings against Joko Widodo's insufficient understandings in political negotiation and diplomacy (Connelly, 2015).

Regarding the Canal's negative impact that might against Indonesia, the Ministry of Maritime Coordinator for 2015-2016, Indroyono Soesilo, stated that 90% of Indonesia's local logistics chains are still crossing through the Makassar Straits. Accordingly, if the Malacca Straits were experiencing a decline in transactional intensity, the Kra Isthmus Canal's lopsided agenda would not have meaningful power in threatening Indonesia's economic environment significantly. Indonesia is a vast country in terms of dimensions and population; all export and import activities must be determined by household demand and supply.

During this time, the famous international logistics route in Indonesia must cross through the Makassar Straits - Malacca Straits, such as from Japan, China, South Korea, East Africa, West Africa, Europe, and America. The data presented in Table 4 below shows that the engagement of Indonesia's sea transportation with Europe, the Indian Ocean, and the Andaman Sea would increasingly have a long-distance if vessels followed the Canal's path; the route that must be taken is way longer to reach Indonesia and vice versa.

Hence, the presence of this shadowed-infrastructure has no vital meaning for Indonesia's shipping industry. From the overhead concept, it can be inferred that Indonesia's constitutional arrangements are way more thoughtful than Thailand as they are still struggling with just a development strategy. Therefore, Indonesia is expected to certainly be prepared to anticipate some other unwanted events that may befall in the future.

Based on The Presidential Regulation Number 37 on the International Route-policy (2002), Indonesia is a large country, complete with its intricate sea lanes. Five routes (straits) are usually traversed if have vessels desired to conduct trades around Indonesia, namely the Malacca Straits, Sunda Straits, Makassar Straits, Lombok Straits, and Ombai-Wetar Straits. Moreover, the existing sea lanes in Indonesia are already congested by domestic and international sea traffic (Rustam, 2016). The following are

Table 4. Distance between Jakarta to Major Foreign Ports

Hub-Ports		Route	Distance via Kra	Distance without Kra	%
Jakarta	Rotterdam	Indonesia-Dutch	16969	16483	23%
Jakarta	Yangon	Indonesia-Myanmar	3531	3045	16%
Chittagong	Jakarta	Bangladesh-Indonesia	4271	3785	12%
Jakarta	Chennai	Indonesia-India	4399	3913	12%
Jakarta	Colombo	Indonesia-Sri Lanka	4462	3976	12%
Mumbai	Jakarta	India-Indonesia	6001	5515	9%
Jakarta	Laem Cha-bang	Indonesia-Thailand	2886	2428	19%

Source: Chen and Kumagai (2016)

Maritime highway plan



Figure 2. Indonesia's Sea Toll Scheme (Source: National Planning Agency)

some thoughts that determine as to why the Canal's proposal is considered to have an insignificant force on Indonesia's aspiration to become the world's maritime fulcrum.

1. Indonesia's extensive sea is a hectic international trade market, so the presence of the Kra Isthmus Canal does not necessarily change Indonesia's long-established business route. ALKI (Indonesia's archipelagic sea lane) is a legal outcome of UNCLOS '82 and has long become the basis for archipelagic sea lane concept following the recognition of the Juanda Declaration in the international reputation; Indonesia established three sea lanes, namely ALKI I, ALKI II, ALKI III (sub-ALKI III B, ALKI III C, ALKI III D, and ALKI III E).
2. Currently, under the power of Joko Widodo, Indonesia is very active in implementing sea tolls both in terms of infrastructure and human resources. Indonesia's domestic marine ventures are still sharpened in national-level activities where 90% of the shipping industry still passes through the Makassar Straits. Therefore, this Canal's unfixd-ambition would not have such a considerable power on Indonesia's internal business market.

According to Ramli (2014), with further examination, the Kra Isthmus Canal would also be advantageous for Indonesia in the future. Here are the root aspects:

1. From an environmental perspective, the hazard of pollution received by Indonesia so far is quite substantial due to the vessels traffic in the Malacca Straits. Therefore, when the body's mobilization in the Straits of Malacca cracked down by the Kra Isthmus Canal, the deterioration and vessel collisions would become minor trouble;
2. There are two major ports in Sumatra Island, Sabang Port and Kuala Tanjung Port. Since these ports are quite close to the Canal's agenda. By optimizing these harbors, they can stimulate economic movements and provide employment opportunities for residents;
3. The Canal could be giving Jakarta more force to rival Singapore. By the emergence of the Canal, Singapore's activities would be declining; this could become a prospect for Jakarta to standing up more on the ASEAN global economic cycle.

Currently, the world is facing the industrial revolution of 4.0. Various classes of challenges for Indonesia to overlook in the maritime perspective must be investigated

immediately. Responding to these challenges, Indonesian Geographers formulated strategies and policies to clarify the basis/uniqueness of the archipelago geo-maritime concept into eight sections as formulated in the book of Paradigma Geomaritim Indonesia (2018):

1. Embrace characters of Indonesia's geography (formation and strategic location) as the basis for managing archipelago resources;
2. Promote the principle of sustainable ecotourism for maritime resources based on national sea spatial planning;
3. Internationalize the principle of the world's maritime fulcrum to a stronger global spotlight;
4. Grant equal proportions to the development and human resources for national prosperity in various ports; the Western group (Indian access), the East-North group (Pacific access), and the Ausindo group (access for Australia & New Zealand);
5. Execute an integration between the port and management partnership (core-hinterland system both on land and sea);
6. Prepare foreign diplomacy strategies by promoting Indonesia's maritime culture;
7. Implement maritime-based education for the quality of human resources; and
8. Prioritize geospatial and information system technology for maritime development studies.

In order to correctly run the maritime strategies and policies that have been arranged beforehand, anticipatory steps (port infrastructure) to deal with increased intercontinental trade need to be settled. Indonesia needs to develop various ports to international quality, from the western edges (Aceh, Medan, and Jakarta) to the eastern borders of Indonesia (Makassar, Sorong, and Surabaya). Also, to anticipate vessels traffic originating from the northern and southern part (the Pacific Ocean and the Indian Ocean), an efficient design must be given more attention to the east part of Indonesia (Sulawesi, West Nusa Tenggara, and Nusa Tenggara East). This scheme could be tackling all transactions traveled to and from the Philippines, Australia, New Zealand, and Timor Leste.

CONCLUSION

The fact that the Kra Isthmus Canal might contribute a more efficient route is promising, but also this advantage can only impress some regions in East Asia, in mainland Southeast Asia (especially Indochina), and the Indian Ocean. Hence, Indonesia should take immediate precautions by developing infrastructure and human resources in key and strategic trade areas. Furthermore, Indonesia can further be empowering maritime safety and security thoroughly by strengthening ALKI I, ALKI II, and ALKI III. By then, the Canal might have no harmful influence or become nightmares for Indonesia's aspiration to be the world's maritime fulcrum. In light of the above mentioned, some preventive steps are required to answer all possible challenges in the future. Considering the Malacca Straits also always exhibit an upward trend day by day, many alternatives and possibilities are unquestionably needed—including the Kra Isthmus Canal—coming to earth.

REFERENCES

- ASEAN Affairs Magazine. (2009, May-June). The Asian Panama Canal: Kra Canal countdown to resurrection. *ASEAN Affairs Magazine*, 3(3), 46–51.
- Badan Informasi Geospasial (BIG) dan Ikatan Geograf Indonesia (IGI). (2018). Paradigma GEOMARITIM: Strategi Mewujudkan Indonesia sebagai Poros Maritim Dunia dalam Perspektif Geografi. Bogor. Badan Informasi Geospasial.

- BBC News Asia-Pacific. (2011, May 05). New Burma port to become trade corridor. *BBC News*. Retrieved from www.bbc.co.uk/news/world-asia-pacific-12490521.
- Billington, M. (2017). Kra canal close to a reality: a hub for the maritime Silk Road. *Weekly Journal from Executive Intelligence Review*, 44(4), 5-9. Retrieved from <http://www.executiveintelligence.com/>.
- Boot, W. (2012, March 09). Dawei Port in doubt with Bangkok hub plan. *The Irrawaddy*. Retrieved from https://www2.irrawaddy.com/article.php?art_id=23176.
- Channel News Asia. (2018, February 14). Proposed Kra Canal not current government project: Thailand. *Channel News Asia*. Retrieved from <https://www.channelnewsasia.com/news/asia/proposed-kra-canal-not-current-government-project-thailand-9950434>.
- Chen, C. M., & Kumagai, S. (2016). Economic impacts of the kra canal: an application of the automatic calculation of sea distance by a GIS. *Institute of Developing Economies*. Japan External Trade Organization (JETRO), 568. Retrieved from <https://ideas.repec.org/p/jet/dpaper/dpaper568.html>.
- Connelly, A. L. (2015). Sovereignty and the sea: President Joko Widodo's foreign policy challenges. *Contemporary Southeast Asia*, 37(1), 1-28. Retrieved from <https://www.jstor.org/stable/24916512>.
- Germond, B. (2015). The geopolitical dimension of maritime security. *Marine Policy*, 54, 137–142. <https://doi.org/10.1016/j.marpol.2014.12.013>.
- Harahap, I.H. (2019). Dampak pembangunan Terusan Kra di Thailand terhadap ekonomi Indonesia. *Jurnal Wacana Politik*, 4(1), 68-80.
- Ho, J. H. (2006). The security of sea lanes in Southeast Asia. *Asian Survey*, 46(4), 558-574.
- Karagiannis, E. (2010). China's pipeline diplomacy: assessing the threat of low-intensity conflicts. *Harvard Asia Quarterly*, 54-60.
- Kinder, I. (2008). Strategic implications of the possible construction of the Thai Canal. *Croatian International Relations Review*, 13(48/49), 109-118.
- Lau, C. Y., & Lee, J. W. C. (2016). The Kra Isthmus Canal: a new strategic solution for China's energy consumption scenario?. *Environmental Management*, 57(1), 1-20.
- Menon, R. (2018). Thailand's Kra Canal: China's way around the Malacca Strait. *The Diplomat*, 6.
- Menteri Perencanaan Pembangunan Nasional/ Kepala Badan Perencanaan Pembangunan Nasional. (2017). Arah Kebijakan Pembangunan Kemaritiman. Jakarta: Sekretariat Negara.
- Negara, S. D., & Das, S. B. (2017). Challenges for Indonesia to achieve its maritime connectivity plan and leverage on regional initiatives. *ISEAS Yushof Ishak Perspective*.
- Peraturan Pemerintah Indonesia. (2017). Undang-Undang Republik Indonesia Nomor 16 Tahun 2017 tentang Kebijakan Kelautan Indonesia. Lembaran Negara Republik Indonesia Tahun 2014 Nomor 294, Tambahan Lembaran Negara Republik Indonesia Nomor 5603. Jakarta: Sekretariat Negara.
- Peraturan Pemerintah Indonesia. (2002). Undang-Undang Republik Indonesia Nomor 37 Tahun 2002 Tentang Hak dan Kewajiban Kapal dan Pesawat Udara Asing dalam Melaksanakan Hak Lintas Alur Laut Kepulauan melalui Alur Laut Kepulauan yang Ditetapkan. Jakarta: Sekretariat Negara.
- Prihartono, B. (2015). Kementerian PPN/ Bappenas & Kementerian Perhubungan Pengembangan Tol Laut Dalam Rjpmn 2015-2019. Konsep Tol Laut dan Implementasi. Jakarta: Sekretariat Negara.

- Rahman, N. S. F. A., Salleh, N. H. M., Najib, A. F. A., & Lun, V. Y. (2016). A descriptive method for analyzing the Kra Canal decision on maritime business patterns in Malaysia. *Journal of Shipping and Trade*, 1(1), 13.
- Ramli, F. (2014, December 28). Memprediksi untung rugi Kanal Kra bagi Indonesia, Singapura menyerah. *Beritagar.id*. Retrieved from <https://beritagar.id/artikel/berita/memprediksi-untung-rugi-kanal-kra-bagi-indonesia>.
- Rustam, I. (2016). Tantangan ALKI dalam mewujudkan cita-cita Indonesia sebagai poros maritim dunia. *Indonesian Perspective*, 1(1), 1-21.
- Saragih, D. N. (2018). Politik pertahanan Indonesia wilayah perbatasan (studi analisis permasalahan perbatasan darat Republik Indonesia–Republik Demokratik Timor Leste).
- Sulong, R. S. (2012). The Kra Canal and Southeast Asian relations. *Journal of Current Southeast Asian Affairs*, 31(4), 109-125.