APRIL
MAGAZINE
2018
CONS ONLINE
CONTRACTORS + CONSTRUCTION + ENGINEERING + ARCHITECT ++
www.consmag.com

Evaluation on Sustainability of Urban Logistics Planning:

Case of One Belt One Road Project, Thailand

เรื่อง/ภาพ : รองศาสตราจารย์ ดร.ระหัตร โรจนประดิษฐ์, Google

โครงการ One Belt One Road ของประเทศจีน เป็นโครงการระดับโลกที่แผ่เครือข่ายไปทั่วเอเชีย ทั้งในรูปแบบของ Formal and Informal Corporations ประเทศไทยก็เป็นประเทศหนึ่งที่เกี่ยวข้องกับโครงการนี้ และสามารถกล่าวได้ว่า มีความสำคัญเป็นหัวใจของเส้นทางสายไหมในยุคโลกาภิวัฒน์ คือ “โครงการคลองไทย” ดังปรากฏการเผยแพร่ออกสู่สาธารณะในหลายรูปแบบแล้ว (CONS July 2017 - บทความพิเศษ OBOR)

ด้วยวิสัยทัศน์ของผู้อำนวยการหลักสูตรวิทยาการจัดการโลจิสติกส์และซัพพลายเชน จุฬาลงกรณ์มหาวิทยาลัย ทำให้หลักสูตรฯตอบรับความร่วมมือกับมหาวิทยาลัยนานาชาติที่มีมหาวิทยาลัยประเทศจีนเป็นเจ้าภาพ เข้าร่วมกิจกรรมการประชุมนานาชาติ Belt & Road Initiative (BRI) Conference ด้วยวัตถุประสงค์เพื่อปกป้องผลประโยชน์ของประเทศชาติ เพราะทราบดีว่ากิจการคลองไทยที่มีประเทศมหาอำนาจต้องการบริหารจัดการแบบเบ็ดเสร็จนั้นจะสร้างปัญหาแก่ประเทศไทยมากมายเพียงใดหากไม่มีการป้องกันอย่างรอบคอบรัดกุม แม้จะไม่ต้องการให้เกิดโครงการ Mega Project Thai Canal ในลักษณะเช่นนี้ แต่ประเทศไทยจะต้านทานได้นานเพียงใด รวมทั้งจะแก้ปัญหาการแสวงหาอาณานิคมยุคใหม่ของสองมหาอำนาจปัจจุบันครั้งนี้ได้อย่างไร เช่นเดียวกับปัญหาที่เคยเกิดขึ้นกับคลองคอดกระในอดีต

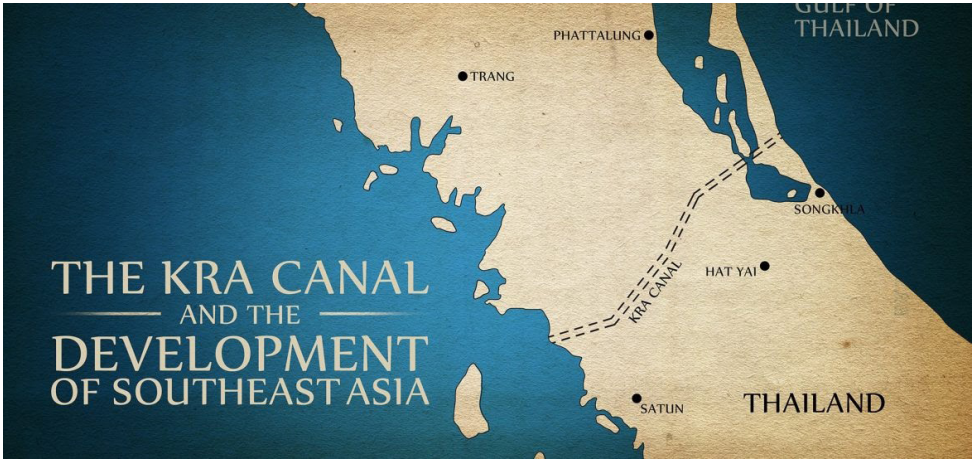
รองศาสตราจารย์ ดร. ระหัตร โรจนประดิษฐ์
ปริญญาตรี สถาปัตยกรรมหลัก, ปริญญาโท การวางแผนภาคและเมือง จุฬาลงกรณ์มหาวิทยาลัย และปริญญาเอก การออกแบบชุมชนเมือง Joint Centre for Urban Design, Oxford Brookes University, United Kingdom
ปัจจุบันดำรงตำแหน่ง ประธานหลักสูตร การออกแบบชุมชนเมือง คณะสถาปัตยกรรมศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย และรองผู้อำนวยการ หลักสูตรวิทยาศาสตร์มหาบัณฑิต สาขาวิชาการจัดการโลจิสติกส์ ดุษฎีบัณฑิต และมหาบัณฑิต จุฬาลงกรณ์มหาวิทยาลัย

สมัยพระบาทสมเด็จพระจุลจอมเกล้าเจ้าอยู่หัวที่เคยทรงแก้ไขปัญหานี้กรณี “อังกฤษ-ฝรั่งเศส” มาแล้ว ดังนั้นเราจำเป็นต้องเข้ารับรู้ยุทธศาสตร์ทางวิชาการ เพราะเรื่องนี้เป็นช่องทางหนึ่งที่รัฐบาลจีนมักจะใช้ในการสร้างเครือข่ายความร่วมมือทางวิชาการ ที่จะขยายกลายเป็นพื้นฐานการเข้าถึงความร่วมมือระดับรัฐบาลต่อไปในอนาคต

ในครั้งนี้มหาวิทยาลัยของประเทศจีนเป็นเจ้าภาพจัดการประชุมทางวิชาการเรื่อง Belt & Road Initiative (BRI) Conference 2018: International Conference on Connectivity in Asia: Trade, Transport, Logistics and Business ด้วยความร่วมมือของ the Asian Logistics Round Table (ALRT) ที่หลักสูตรฯเป็นสมาชิกด้วย https://www.rmit.edu.vn/belt-road-initiative-bri-conference

- Ocean College, Zhejiang University China
- RMIT University Vietnam Vietnam
- Inha University Korea
- RMIT University, Australia
- 24-26 June 2018 Ho Chi Minh, Vietnam

หลักสูตรฯจึงได้ส่ง Academic Research เรื่อง Evaluation on Sustainability of Urban Logistics Planning: Case of One Belt One Road Project, Thailand ในวัตถุประสงค์ที่ว่า “หากจะมีการขุดคลองไทย ตามยุทธศาสตร์ One Belt One Road ของประเทศจีนแล้ว Location, Characteristics, Rule & Regulation etc. ของคลองไทยจะเป็นอย่างไร จะต้องรักษากฎเกณฑ์ของประเทศไทยอย่างไรที่จะไม่ทำลายสภาพเศรษฐกิจ สังคม ชุมชน สิ่งแวดล้อม ความมั่นคงและผลประโยชน์ของประเทศไทย” ดังแสดงตัวอย่างต่อไปนี้



Evaluation on Sustainability of Urban Logistics Planning:

Case of One Belt One Road Project, Thailand

Introduction

This paper aims to understanding key issues of configuration logistics perception of One Belt One Road (OBOR) Project in case of its evolution and effectiveness which it's passing the precincts of Thailand. Thailand is located between South China Sea and Andaman Sea in Southeast Asia Region, which are suitable location and surrounded with plenty of Asian sea logistics routes. With the high economic growth and potential of logistics procedure, at the same time, there are many areas effects of environment and social communities by Sea Freight Traffic. At present, Thai Government has promoted situation of Logistics HUB to Thailand, as Sea Air and Land Logistics Transportation (SEAL). Many sea freight routes both Thai and foreigners come to our country. The Gulf of Thailand and Andaman Coastal are the attractive sea logistics destinations, which made economic profit and urban development along these coats, at the same time sea traffic congestion, sea resource, communities and environments are disturbed. Thus in term of green logistics perception, it needs to prevent and solve these problems.

Logistics and Supply Chain Management Program, Chulalongkorn University is one organization which interested in these complication problems, without effective knowledge and high technology of logistics and supply chain management and urban planning, this canal route of One Belt One Road (OBOR) could made serious problems to social communities and environment and it will not be successful.

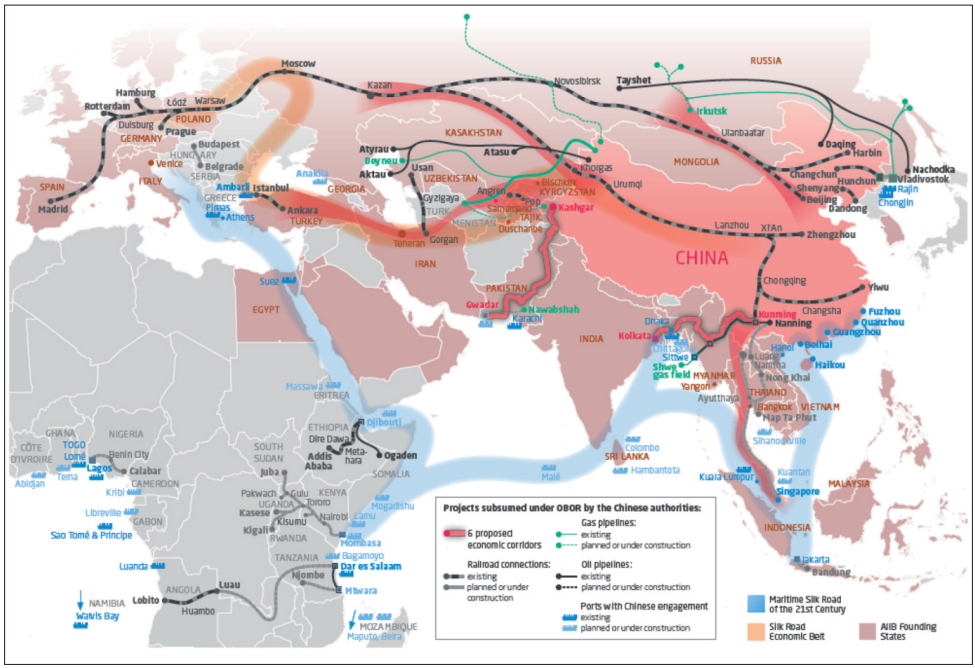


Figure 1: The Freight Routes in One Belt One Road (OBOR) Project

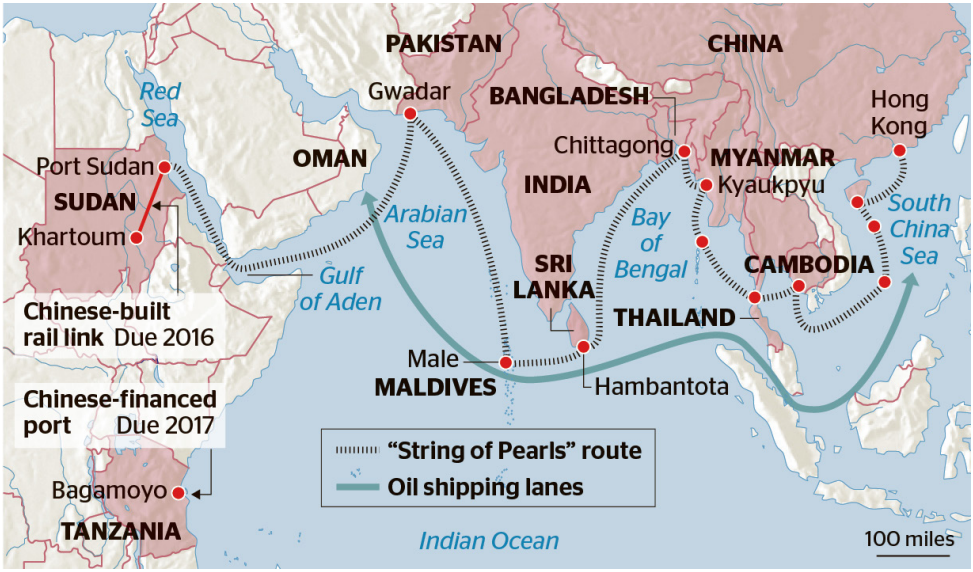


Figure 2: Thailand Sea Freight Routes in One Belt One Road (OBOR) Project

Location Analysis for Port and Industrial Potential 5 sections

Such is the Ranong port, now in the process of development and expansion. In reality, therefore, it can be regarded as an important gateway or link between countries in the east and those in the west. With the combined working efforts and strategies and planning both from the private as well as the government sectors, and the necessary infrastructure provided. The port city exemplified in the Ranong project can be further developed and expanded to enable it to become one of the leading port cities in the Asian context. The potential is there, and it requires only the national will and determination to make the developing project a practical reality. Such an urbanization process with environment consideration can only be viable or successfully implemented with the over-all support of the following essential or vital service network: environmental planning, transportation integration-road and rail, essential services like education, health-care services, all of which constitute a firm supporting base or foundation for the successful evolution of a prosperous and vibrant port city. These concepts and principles form the main body of discussion or deliberations in this research.

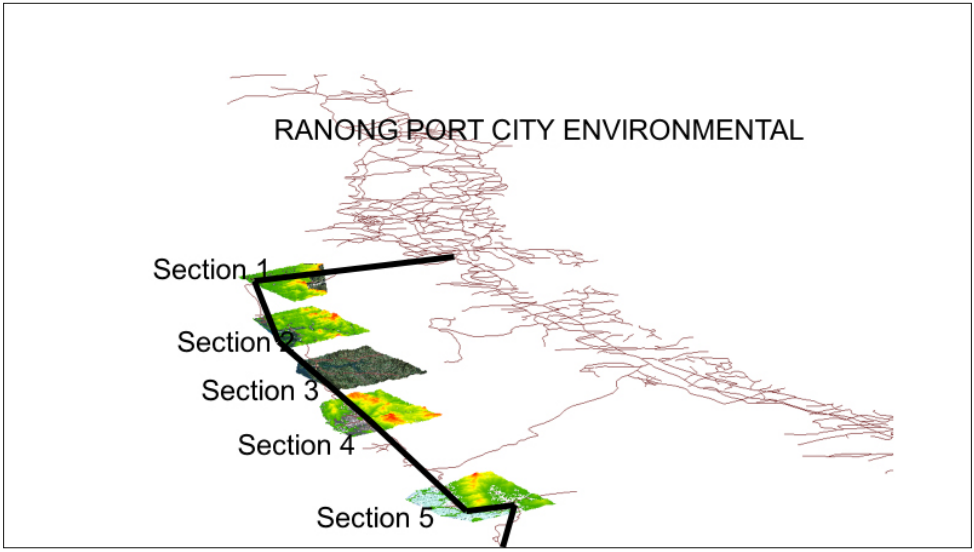


Figure 3: Ranong Survey in 5 sections

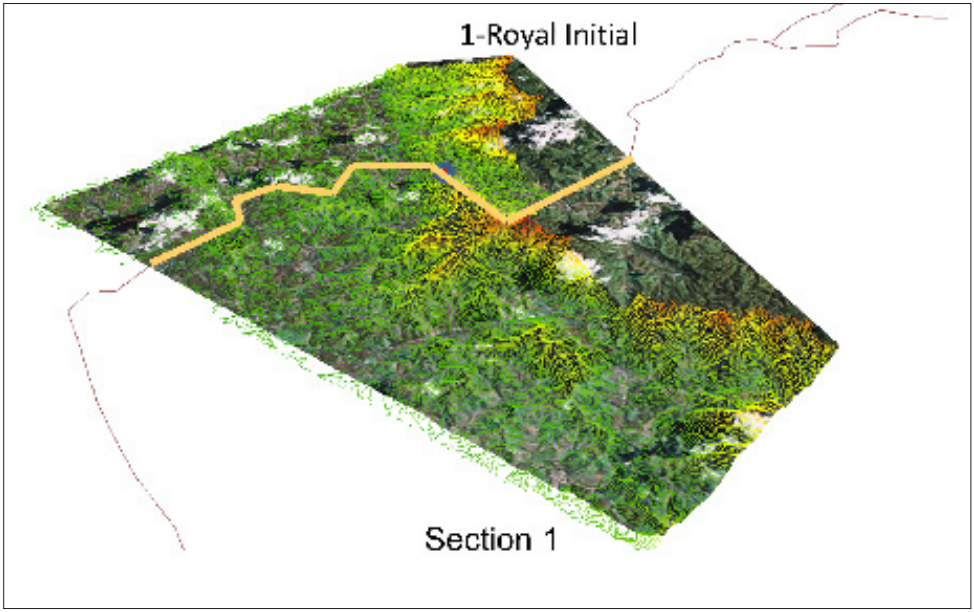


Figure 4: Ranong Survey in Section 1

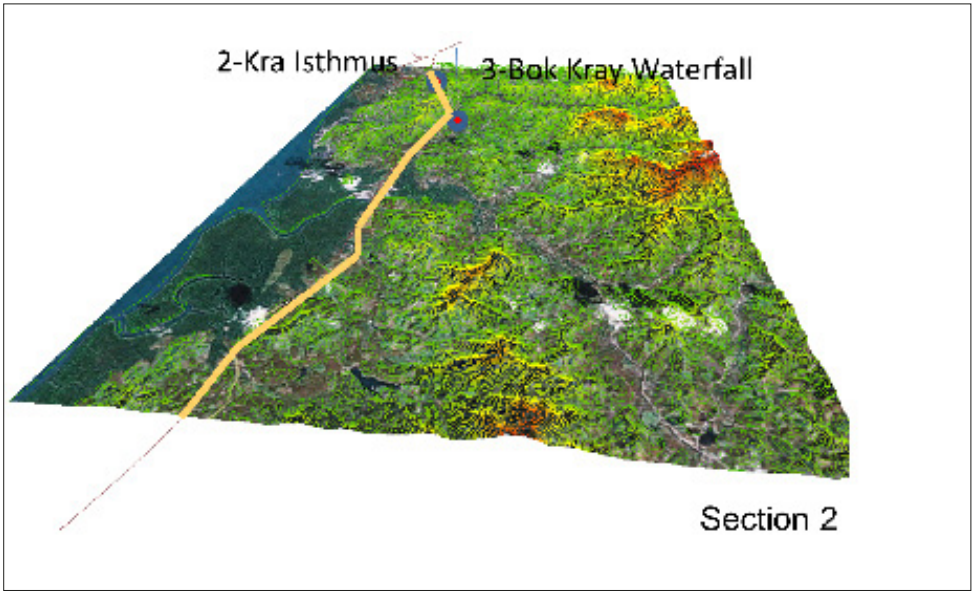


Figure 5: Ranong Survey in Section 2

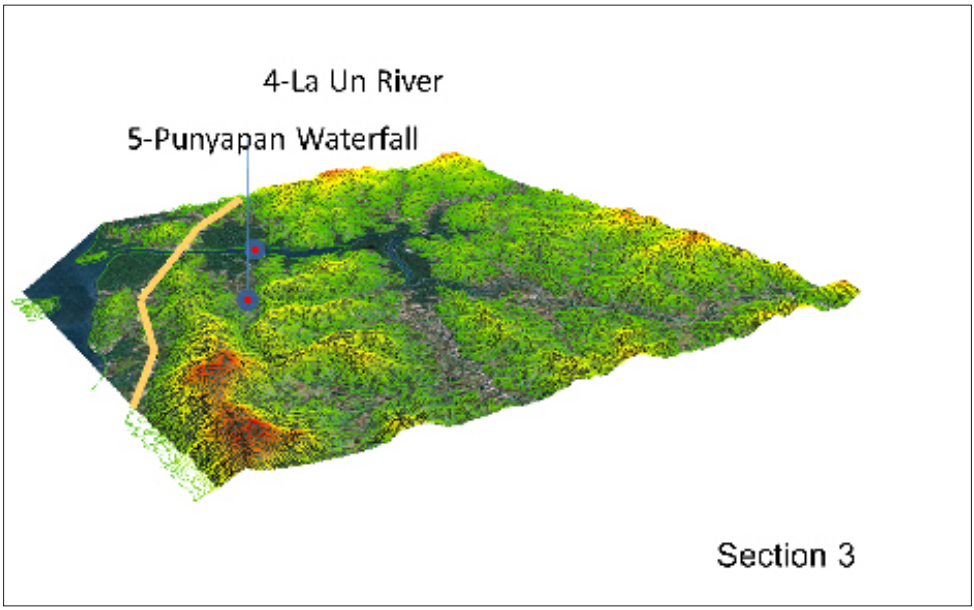


Figure 6: Ranong Survey in Section 3

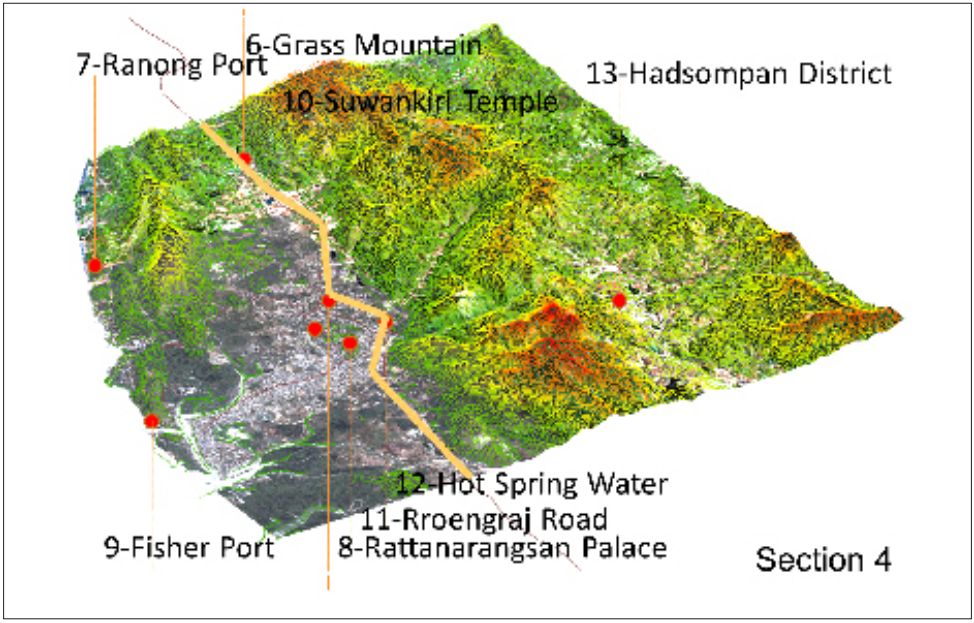


Figure 7: Ranong Survey in Section 4

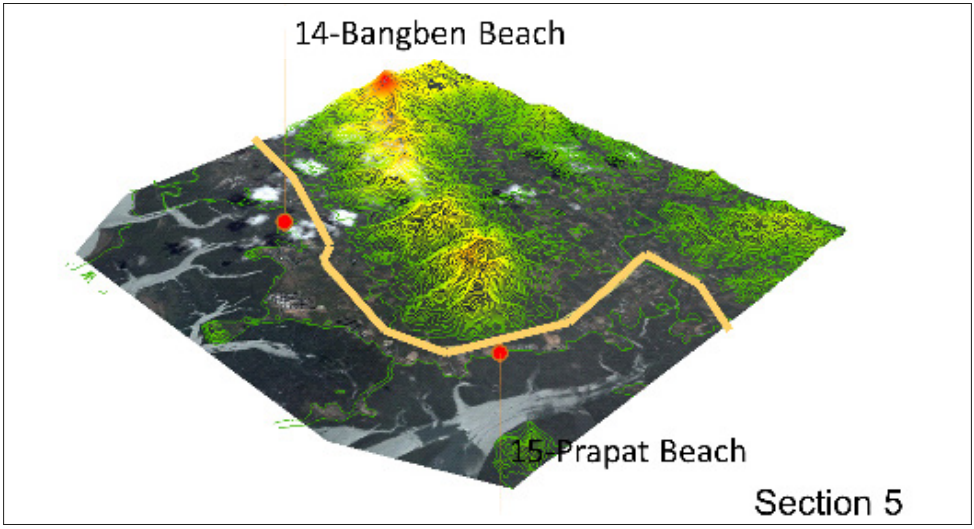


Figure 8: Ranong Survey in Section 5

Port City Planning and Design

Program analysis in Port Planning: (case study of Bangkok Port 2015)
Cargo throughput 1,300,000 TEUs / year
Ship passing through 2,550 Vessels / year

Figure 9: Survey Thai Canal Route 4006

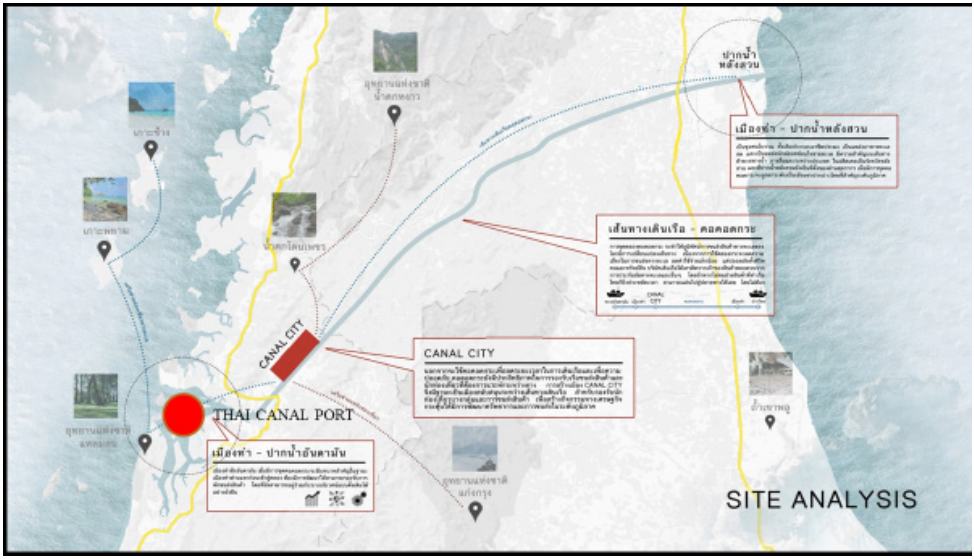


Figure 10: Thai Canal Proposed Model

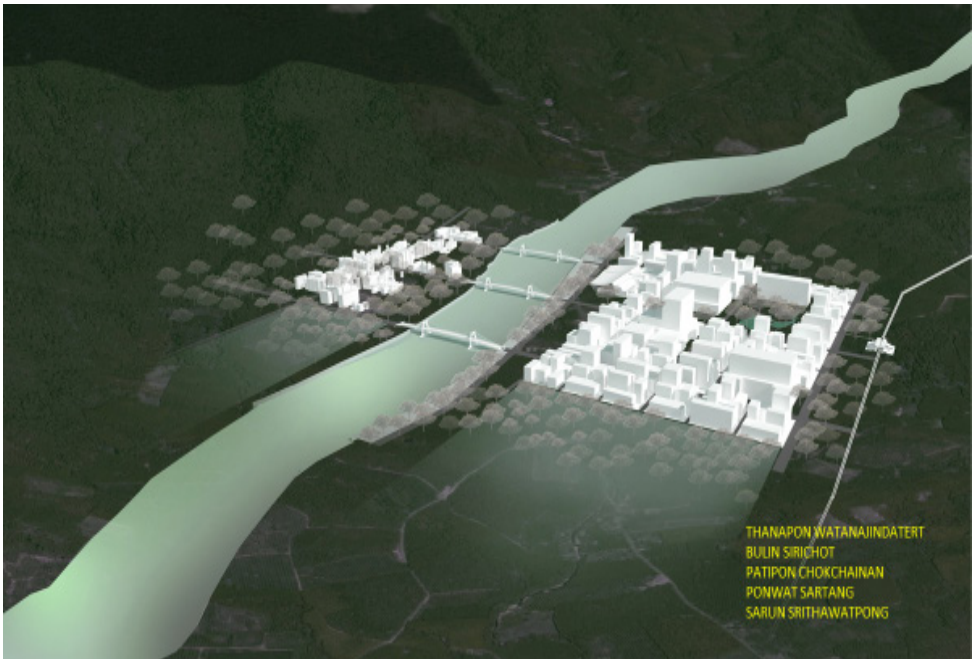


Figure 11: Thai Canal City Proposed Model

Figure 12: Thai Canal Port Proposed Model

The research outlines the summary of the main conclusions of port city environmental planning, and the port and city relationships. The characteristics, which are embodied in the environmental guidance, form the basis of discussion in respect of urban planning and design, and they determine the main guidelines formulated for the port city strategy. The findings based on relevant data and reliable and accurate information sources in respect of world-wide port operation systems outlined in this chapter can be considered as an adequate and accurate representation of what port city can hope to achieve in term of the modern urbanization process currently being implemented.

The conclusion pertaining to the ambitious port city development program are valid if we take into consideration the urban environmental ideal geographic and strategic position in the

Urban Logistics Planning Guideline from Workshop

Thai Canal will become the new economic sea route in Asia, will derive many economic advantages and the nation will generate enormous revenue for country. Thai Canal opponents have raised several objections to the construction of a canal:

1. Environmental concerns and the excavated soil will need to be dealt.

2. The canal will divide the country physically and pose a security risk. It is feared that a canal would separate the four southern-most provinces from the rest of Thailand and allow secessionist movements to further develop

3. The millions foreign workers will migrate to the country which might take over all the job from Thai workers.

The purpose of the research studied the related issues such as:

1. The significant impact to Thailand from digging Thai Canal.

2. Economic and Political aspects will have studied how to create defensive measure in order to protect country benefits and the intervened affairs.

3. Creating law and regulation for protect country benefits and to maintain standard of all activities of Thai Canal in the future.

In terms of Maritime Operation Control, the major aspects as following:

1. Environment issues were the regulation to protect and prevent the marine environment, covering prevention of pollution of the marine environment by ships from operational or accidental causes. The main objectives are aimed at preventing and minimizing pollution from ships - both accidental pollution and that from routine operations.

2. Safety for operation and controlling, which are deal with the vessels standards including the equipment in the vessels are depend on the standards' manual and ship registration legally. The main objective is to specify minimum standards for the construction, equipment and operation of ships, compatible with their safety. And Flag States are responsible for ensuring that ships under their flag comply with its requirements.

3. Human resources management was the main point to improve all of procedures and regulation all of Crews. All of crews were expected to certify the competency-based training programs and assessment. This regulation included the guidance of training organization and appropriate working schedule individually.

4. The carriage of good by sea, goods dispatching was approached the rules of vessel inspection, import-export documents, shippers' responsibilities including final inspection to meet the highest standard.

5. Vessels permission and navigation allowance, this point was initiate the effects for the various aspects, for examples, type of the vessels, dimension limitation, rules and

regulations of navigation and suitable routes for shipping beneath protection national benefits.

In conclusion from the five aspects, maritime operation control disciplines, were covered all of the operation of marine. Thus, these disciplines could be mainly protected National security and the entire environment for our people in Thailand.

Urban Logistics Planning: Due to this enormous excavation required funding and technology. Thus most of investment received from abroad. Therefore, Thailand should study the benefits to be gained and the effect to cause the project of economic, environment, etc. The urban planning of canal project is a community management, society, city and utilities and facilities. The development consists of systematic regulation. The Government should have established or legal measures to prevent the interests of the country. Whether it should proportion in the investment of foreign investors, workers and treatment include green areas, so this program disturbs nature is minimal. The law for industrial area and commercial area in such areas and various construction. In the area along the canal should be approved by the Department of Public Works and Town & Country Planning before start construction.

However, the proposed the concept of measures, regulations, rules and regulations, standard operation in constructing urban and regional planning control geographic measures. the concept of the development project to help canal with benefits. With no effect the livelihood of the people in the area. Ecology and environment as well as to the minimum. For the benefit of the nation.

The three components representing Thai Canal Route Project

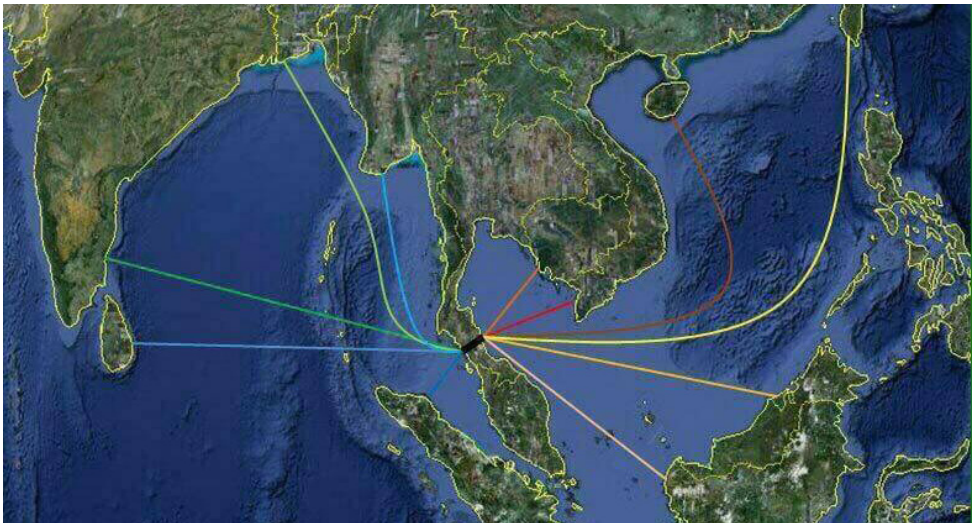
in Ranong Province evolution process can be outlined as follows: Firstly, the conceptual guidelines that determine the aim and objective of Thai Canal development. Secondly, the management controls involved in the urban logistics processes in respect of the city. Lastly, the physical guidelines underlying Thai Canal built environment which form the general structure of the city and its evolution process. Terms of development are divided as 5 years for short-term plan, 10 years for long-term plan.

Guideline Principle Plan

1. Conceptual Aspect Plan

The conceptual guideline will provide the essential guide to the aims and objectives in respect of Thai Canal Project environment, its development growth and achievements in the contemporary context such as Aims and objectives, Characteristics of City and concepts of built environment in city center.

Aims/Objectives, aims and objectives in canal port functions involving the activity of sea transportation from capital city to provide both economic support and social growth in the decentralization process which can do much more than provided the solutions to the problem of city congestion. Thus, the location of under-developed areas suitable for canal port operation will be considered and selected. The new urban structure will be concerned with related logistics activities, canal port operation and industrial estate development. The



Thai Canal City will be controlled role duty and volume of logistics operation to be a regional growth depends on size of those cities.

Characteristics features of Thai Canal City; National policy is planned to promote urban growth and at the same time to solve the environmental problems arising from the process of centralization of the prime city by creating a new hinterland that can be independent of the other major centers.

2. Management Aspect Plan

The management guidelines in respect of city logistics planning lie in specific characteristics for Thai Canal City as well as urban living. Land use is an important consideration in terms of its relevance to help complement the Thai Canal Project in Ranong Province evolution framework.

Effective of Canal City needed for efficient logistics operations and other business-related activities; however, it needs to balance for environment as quality of people living. Whether it necessary to increase potential of logistics activities for higher effectiveness, it need to spread quality of life for people living in city that will make sustainable for urban development of Ranong province.

Co-ordination within various organizations provides an important support for both the macro as well as the micro scales of Thai Canal Project in Ranong Province environmental and development plans. Efficient of employees both in government and military sectors in the area should be better than normal provinces. As it is a national security activity, changing of government law and regulation for increasing logistics activities with particular environment codes are important.

Public participation – an essential element of the Thai Canal Project in Ranong Province environment guideline. It is necessary to consider benefit either direct or indirect to local people. Established the unit of logistics sectors and public sectors may be get problem at first stage of development, however, at last logistics operation will be the proud activities of the city.

3. Physical Aspect Plan

The physical guidelines governing the relationship of Thai Canal port and city represent essential concepts of port patterns. They are important elements which help determine both advantage and disadvantage issues.

Improvement of Thai Canal Route, port, industrial and city center relationship, for service facility and infrastructure. Balancing efficiency of logistics, port and industrial

productivity and people environment facilities by established committee for two-way communication

Keeping quality of infrastructure and facilities in better condition and planning by government. It could be established independent communities which can decides and control term of work such as construction of new hinterland will have related to electricity, water supply and telecommunication that can constructed at the same time.

Controlling of changing and growth of Thai Canal City in order to planning environment master plan and others detailing system in each organization due in the same direction of development.

Persuading of corroboration among whole logistics, port, industrial and environmental system organizations such as logistics, government environment organizations, industrial, port transportation, bus, train related to behavior of local people, while separate some systems such as logistics activities from local people traffic. CONS