

# DRY PORT BUSINESS DEVELOPMENT STRATEGY

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JAM

16, 4

Received, October 2018

Revised, October 2018

November 2018

Accepted, November 2018

**Abstract:** Export and import activities are the most important part of economic activity in Indonesia. These need to be supported by good port infrastructure. Cikarang Dry Port (CDP) as the only Dry Port, owned by private, should be able to support export and import activities and supply chains, especially in the Greater Jakarta and Cikarang areas. There is a need to develop appropriate business development strategies to maximize resources and optimize opportunities from the CDP business environment. These study aims were identifying the influence of internal and external factors that affect the development of the CDP business and formulating business development strategies. The method used in this study is descriptive analysis and purposive sampling. Analytical tools used include internal and external analysis and SWOT. The main strength is the availability of land port capacity. An external factor that provides relative significance to the successful development of Dry Port is the usage of internet and application on a smartphone. The regulation for expansion and New Priok business development by JICT which is the biggest threat scored. Future research is expected to analyze the efficiency of time, performance and human resources in Cikarang Dry Port.

**Keywords:** dry port, external factor evaluation, internal factor evaluation, swot matrix.



Journal of Applied  
Management (JAM)  
Volume 16 Number 4,  
December 2018  
Indexed in Google Scholar

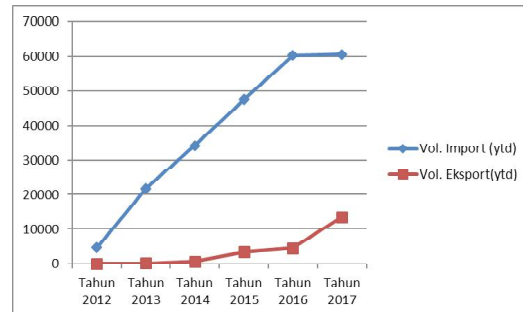
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com, DOI: [http://dx.doi.org/  
10.21776/ub.jam.2018.016.  
04.01](http://dx.doi.org/10.21776/ub.jam.2018.016.04.01)

In the midst of the swift flow of globalization and the world free market, export and import activities cannot be separated from the economic activities of a country. This encourages the need for multimodal transportation supported by these facilities, one of which is the port. Ports used in facilitating and developing international trade (Haralambides and Girish, 2011). The dry port concept has integrated basic logistics tasks by improving service and commercial finance. In its development, the concept

of dry port emerged as the development of the sea-port infrastructure. Dry ports are inland areas that can be used to promote the sea (Suyono, 2001). Functions such as customs, loading and unloading facilities, stacking under the supervision of customs, shipping agents, and banks. Dry ports are categorized based on their distance, which is a short distance, medium distance and long distance (Roso, et al., 2009). One of the largest dry ports in Indonesia is in Cikarang, which is in the Jababeka business district. The port is Cikarang Dry Port (CDP). This dry port is support for export and import activities, especially in the Jababeka industrial area. The core business of Cikarang Dry Port is engaged in port and export import. Cikarang Dry Port is very strategic because it is located in the Jababeka Industrial Estate. Its location is in the heart of the largest zone of West Java manufacturing. There are more

than 2 500 industrial companies, both multinational and Small and Medium Enterprises (SMEs) in the zone. There are around 200 hectares allocated for dry ports that are easily accessed by highways and railroad systems. The added value of the railroad aspect besides reducing waiting time will reduce carbon gas emissions (Jeevan, et al., 2015). On the trip, there were several problems related to the price development strategy. There is a significant difference between the rates in JICT and CDP. Quoted on the official website at cikarangdryport.com, Cikarang Dry Port offers a one stop service for international cargo handling and logistics delivery. CDP provides ports and logistics with operators and exporters such as exporters, importers, operators, terminal operators, container goods stations, bonded warehouses, transportation, third party logistics (3PL), empty container depots, and banks and other facilities. The formality of documents for port clearance and customs can be completed in Cikarang Dry Port because CDP is the gate of the Tanjung Priok International Port. Cikarang Dry Port is also engaged in the port sector for export and import activities. This is safe by regulating the length of loading and unloading or dwelling time. This problem is the equivalent of being discussed by the President of the Republic of Indonesia, Joko Widodo, conducting inspections at the JICT Port in Tanjung Priok. The President instructs the waiting time to be less than 3.1 days because the supply chain system and the price of goods will be issued. According to GM Commercial Cikarang Dry Port, Imam Wahyudi, the Dry Port system in Cikarang will help the container stack to be decomposed while at the same time supporting the reduction in residence time at Tanjung Priok Port to 2.1 days (Rahajeng, 2016). CDP currently only serves 60 000 - 70 000 TEUs (twenty feet equivalent units) per year than what was set by the company in 2017 of 100 000 TEUs. Its market share is about 3 percent of the 62 percent of Cikarang industrial goods in Bekasi, which are shipped through Tanjung Priok Port. In the long term, CDP will increase the capacity of container stacking surface to 2.5 million TEUs per year from

the current 400,000 TEUs per year, as seen in Figure 1.



Source: Cikarang Dry Port

Figure 1 Container Volume Sales of Cikarang Dry Port

Based on the description of the background and the formulation of the problem, the purpose of this study is to analyze the current condition of the company. Identify the influence of internal and external factors that affect the business development of Cikarang Dry Port and formulate the strategy for developing the Cikarang Dry Port business.

**METHOD**

Source of data uses primary data and secondary data. Primary data obtained is obtained by interviews which are processed by researchers to be used as determining strategies that affect the company. Data collection techniques through interviews and Cikarang Dry Port questionnaires. Secondary data were obtained from literature studies related to container business development strategies and related data collection from Cikarang Dry Port which was processed by researchers. The sampling technique is done by purposive sampling and judgment sampling technique, namely sampling with the aim of getting respondents who have the capacity and competence in accordance with the objectives. The internal parties who are respondents are marketing managers, from Cikarang Dry Port and external parties involved including tracking, , and port economist. The stages of data processing and analysis can be seen in Table 1.

**Table 1 Processing and Data Analysis**

Stages	aims	Analysis Tool	Output
I	Evaluation of company performance	Fact finding with interviews and literature studies	Company performance
II	Analysis of the external environment	PESTEL	Corporate opportunities and threats
III	Internal environment analysis	Value Creation	Strengths and weaknesses of the company
IV	Evaluation of external and internal environments	EFE and IFE Matrix	The company's current position in the IE matrix quadrant
V	Formulation of strategy for developing dry port business	SWOT matrix	The strategies produced for the development of the dry port business.

**RESULTS AND DISCUSSION**

**Current Company Conditions**

Asset growth, revenue and capacity utilization of Cikarang Dry Port since 2010-2017 experienced a significant increase, namely the Cikarang Dry Port assets increased from Rp. 2.38 billion in 2010 to Rp. 134.2 billion in 2017. Likewise, the income achieved by Cikarang Dry Port in 2010 recorded revenue of Rp. 409 000 000 and experienced a significant increase in 2017 of Rp. 171 billion. But the growth in the number of assets and income from Cikarang Dry Port is not included with utilities or utilization of optimal capacity. The land capacity owned by Cikarang Dry Port is 400,000 TEUs and can still be developed up to 2 million TEUs for opti-

mal use. The sales achievement targeted by the company has not been able to adjust to the existing capacity, even the target announced by the company is 100,000 TEUs in 2017. As shown in Figure 1, in 2012-2017 the capacity utilization of container land continues to increase and tends to be influenced by performance domestic exports continue to increase. However, this figure is still very small considering the capacity owned by Cikarang Dry Port has not been optimally optimized.

**Stage Input (Input Stage) with IFE-EFE**

The analysis used in this study begins with the identification of internal and external factors from Cikarang Dry Port. Data retrieval is done through

**Table 2 Internal Factor Evaluation (IFE) Matrix**

INDICATOR	WEIGHT	RATING	SCORE
<b>POWER</b>			
Availability of dry port capacity	0,14	4	0,56
Completeness of dry port infrastructure	0,13	4	0,52
Comparison of Terminal Rates	0,13	3	0,39
Dry port bureaucratic path	0,12	3	0,36
IT system innovation	0,12	4	0,48
<b>WEAKNESS</b>			
Promotion is not optimal	0,07	2	0,14
Not many PPJK-Tracking	0,09	2	0,18
There is double handling which results in additional costs	0,08	2	0,16
Not many container depots	0,06	2	0,12
Negotiate with stakeholders	0,06	2	0,12
<b>TOTAL</b>	<b>1,00</b>		<b>3,03</b>

in-depth interviews with related decision makers in improving the development of the dry port business in Cikarang Dry Port. The value of internal factors can be seen in Table 2.

Based on the calculation of internal strategic factors, the main strength of Cikarang Dry Port is the availability of dry port capacity. This is indicated by a score of 0.56. The strategic factor which is the

main weakness is that there are not many PPJK-Tracking which have a score of 0.18. The lowest weakness factor is the factor of not many container depots and negotiations with stakeholders who have a score of 0.12. The total score of the IFE Matrix is 3.03. The results of the analysis of external factors can be seen in Table 3.

**Table 3 External Factor Evaluation (EFE) Matrix**

INDICATOR	WEIGHT	RATING	SCORE
<b>OPPORTUNITIES</b>			
Economic Policy Package 15	0,07	3	0,21
Has a multimodal concept	0,08	4	0,32
Gross domestic income	0,08	3	0,24
Indonesian exports and imports	0,07	4	0,28
Infrastructure	0,06	3	0,18
Land clearing	0,06	3	0,18
Value added support for dry ports	0,07	4	0,28
Development of power plants and dry port support businesses	0,07	4	0,28
Use of the internet and applications on smart devices	0,08	4	0,32
The ability to understand urban planning	0,06	4	0,24
<b>THREAT</b>			
There is no masterplan related to dry port	0,04	2	0,08
There are not many regulations governing dry port	0,04	2	0,08
The rupiah exchange rate is not stable	0,04	2	0,08
Increase in oil price	0,05	2	0,10
Lack of knowledge regarding dry port	0,05	2	0,10
New Priok business development by JICT	0,03	2	0,06
Expansion Regulation	0,04	1	0,04
<b>TOTAL</b>	<b>1,00</b>		<b>3,07</b>

The highest value of opportunity factors is to have a multimodal concept and internet utilization and an application on smart devices that is equal to 0.32. The smallest opportunity factor in the EFE matrix is the infrastructure factor which is equal to 0.18, which means the smallest opportunity expected by Cikarang Dry Port. While the highest threat factor is the increase in oil prices and a lack of public knowledge about the Dry Port of 0.1, which means the two factors represent the biggest threat in business development from Cikarang Dry Port.

The smallest threat factor is the absence of regulations governing Dry Port and related to expansion. With a total IFE matrix score of 3.07.

**IE Matrix Analysis**

Based on EFE and IFE values of 3.07 and 3.03. Cikarang Dry Port is in cell position 1. According to David (2009), the right strategy to respond to these results is through intensive strategies, namely market development, product development, and integration strategies.

**SWOT analysis**

The incorporation of internal and external factors through the stages of analysis in the SWOT matrix will produce alternative strategies for business development from Cikarang Dry Port. The SWOT matrix will produce four main strategies,

namely: Strengths-Opportunities, ST Strengths, Weakness-Opportunities and Weak-of-Threats Strategies (Rangkuti, 2014). As can be seen in Table 4, which are strategic alternatives derived from the SWOT matrix analysis of the Cikarang Dry Port business development.

**Table 4 SWOT matrix Cikarang Dry Port**

<b>Internal</b>	<b>Strengths (S)</b>	<b>Weakness (W)</b>
	<ol style="list-style-type: none"> <li>1. Availability of dry port capacity</li> <li>2. Complete dry port infrastructure</li> <li>3. Comparison of terminal rates</li> <li>4. Dry port bureaucracy lines</li> <li>5. IT system innovation</li> </ol>	<ol style="list-style-type: none"> <li>1. Promotion is not optimal</li> <li>2. Not many PPJK and truck service providers in Cikarang Dry Port</li> <li>3. There is double handling</li> <li>4. Not many container depots in Cikarang Dry Port</li> <li>5. Negotiate with stakeholders</li> </ol>
<b>Eksternal</b>	<b>Opportunities (O)</b>	<b>WO Strategy</b>
	<ol style="list-style-type: none"> <li>1. Economic Policy Package 15</li> <li>2. Has a Multimodal Concept</li> <li>3. Gross Domestic Income (GDP)</li> <li>4. Indonesian Exports and Imports</li> <li>5. Infrastructure</li> <li>6. Land clearing</li> <li>7. Value added support for dry ports</li> <li>8. Development of power plants and port support businesses</li> <li>9. Use of the internet and applications on smart devices</li> <li>10. Ability to understand the city</li> </ol>	<ol style="list-style-type: none"> <li>1. Conduct large-scale promotions inside and outside Cikarang (W1, O4, O7)</li> <li>2. Encouraging the acceleration of the loading and unloading process from Tanjung Priok with the logistics train line. (W3, O1, O2)</li> <li>3. Promoting PPJK and truck service providers outside Cikarang to operate in Cikarang Dry Port (W1, W2, O7, O4)</li> <li>4. Increase the capacity of empty container depots in Cikarang Dry Port and cooperate with container depot providers to open container depots in Cikarang (W4, W5, O4, O5)</li> <li>5. Regulate regulations related to minimum waiting time, delivery and loading and unloading processes (W3, W5, O4, O5)</li> </ol>
<b>Threats (T)</b>	<b>ST strategy</b>	<b>WT Strategy</b>
<ol style="list-style-type: none"> <li>1. There is no masterplan related to dry port</li> <li>2. There are not many regulations that regulate the Dry Port</li> <li>3. Unstable rupiah exchange rate</li> <li>4. Increase in oil prices</li> <li>5. Lack of knowledge regarding Dry Port</li> <li>6. Development of the New Priok business by JICT</li> <li>7. Regulation of expansion</li> </ol>	<ol style="list-style-type: none"> <li>1. Cikarang Dry port Masterplan (S2, S4, T1, T2)</li> <li>2. Providing convenience to exporters (S3, T3)</li> <li>3. Personal Approach to potential customers outside Jababeka Industrial Estate (S3, T5)</li> </ol>	<ol style="list-style-type: none"> <li>1. There is often socialization regarding dry ports (W1, T5)</li> <li>2. Adjusting Logistics Train capacity from Tanjung Priok to Cikarang Dry Port (W5, T6)</li> </ol>

## S-O STRATEGY

### **Develop smart device-based E-DO, E-Billing and E-Tracking applications (S5, O9, O7, and O4)**

The strategy to develop supporting E-DO, E-Billing and E-Tracking media-based smart device applications need to be done because these facilities and services have not been fully optimized by Cikarang Dry Port. This is because application technology is a significant factor affecting consumers (Ihsani, 2018). The strength possessed by Cikarang Dry Port such as IT system innovation (S5) can maximize the trend of internet utilization and applications on smart devices (O9) and combine supporting value added for Cikarang Dry Port (O7). Cikarang Dry Port can work with IT and supporting companies as value enhancers of dry ports to support export and import activities (O4), especially from Tanjung Priok Port. The development of smart device-based E-DO, E-Billing and E-Tracking applications as a strategy used by Cikarang Dry Port for business development processes can be implemented with rocks from stakeholders, especially the government. The strategy will create a logistics supply chain system that does not take much time and will benefit from the perspective of business people by facilitating the logistics distribution process to those related to port activities. The strategy of developing smart device-based supporting applications needs to be supported by a good IT system (Ruswandi and Gartika 2013) so that port service users do not experience difficulties when accessing data from the My CDP service and anticipate all risks arising from the strategy implementation mechanism (Soemantadiredja, 2017)

### **Optimizing own power plants and packaging on dry ports (S2, O8, and O7)**

The strategy for optimizing its own power plant and packaging in the dry port of Cikarang Dry Port is one of the efforts to optimize the completeness of the dry port infrastructure (S2) by striving to develop a power plant (O8) to support the creation of additional values to support dry port (O7) activities in Cikarang Dry Port. The Jababeka steam power plant namely Bekasi Power is negotiating with the

State Electricity Company (PLN) to repurchase after terminating power shipments to PLN which results in a decrease in own income by Bekasi Power. Availability factor Bekasi Power a year on average reaches 90 of the contract capacity. During the five years of the PLTGU operation, the company followed the provisions. However, since the beginning of 2018, the National Electric Company has requested a 0 Kwh shutdown or shipment which makes the PLTGU be treated as cold reserves. But in the midst of the existing problems, Cikarang Dry Port needs to ensure that the availability of electricity resources must be fulfilled so that business activities from dry ports do not experience serious problems. Supporting the value added factor that can be done by Cikarang Dry Port in addition to providing building services for leasing, the company is considered necessary to expand to port support businesses such as packaging, especially if the optimization of the Bonded Logistics Center to supply imported cotton has begun. In addition, there is a need to prepare for anticipating a surge in containers after the operation of the Inland Waterways announced by the government will begin operating in 2021.

### **Speed up and simplify the process of customer documents (S1, S4, S5, and O1)**

The strength of Cikarang Dry is the availability of port capacity reaching 400 000 TEUs (S1) which can be maximized to 2.5 million TEUs. This factor will encourage the acceleration of the loading and unloading process of the logistics port brought in from Tanjung Priok Port so that it will not take a long time to wait related to the port process. However, the acceleration of the loading and unloading process is not only in the process in the field but also in the dry port bureaucracy. The permit arrangement includes document checking, document completion, customs and excise approval, shipping approval and document sealing (Syahbanu, 2014). Cikarang Dry Port as an Integrated Customs Service Area (KPPT) has a good dry port bureaucracy because it is an embodiment of a government program, namely Indonesia National Single Window (INSW) which aims to cut time and costs in the

national logistics distribution process (S4). Port services through IT system innovation (S5) which are integrated between quarantine, BPOM and customs can now be accessed through INSW so that it is expected to simplify the process of customer documents. By considering the economic policy package 15 (O1), the utilization of Cikarang Dry Port as an alternative solution to reduce the dwelling time rate at Tanjung Priok Port. The strategy will accentuate the integration of access and systems between the main port and dry port (Parraga, et al., 2014).

### **Preparing supporting facilities for Inland Waterways (S1, S2, and O5)**

In 2018 the government under PT Pelabuhan Indonesia II is planned to begin construction of the construction of the Inland Waterways/CBL which aims to develop the potential of the Cikarang Bekasi Laut canal line through Marunda. Project worth Rp. 3.4 T is expected to reduce the density of the landline logistics flow from the industrial area located in Cikarang towards Tanjung Priok Port. The Inland Waterways project is expected to be operational in 2021 through two stages, namely preparing a canal transportation system built by the Ministry of Public Works and Public Housing and stage 2 adding canal routes from Tanjung Priok to Cikampek that connects the logistical flow of Cibitung-Cikarang Industrial Area in Bekasi and Karawang. According to Tan, et al. (2015), the presence of inland waterways will significantly reduce congestion on land transportation lines. However, dry ports close to the hinterland (industrial area) need to prepare supporting infrastructure for the inland waterways. This is because export and import activities will be strongly influenced by the hinterland area (Nainggolan, 2017). Cikarang Dry Port by considering the availability of port capacity (S1) and the completeness of the dry port infrastructure (S2), need to prepare before and after the operation of Cikarang Bekasi Laut. The Infrastructure Development (O5), will make a significant surge from container volume flows in Cikarang Dry Port. Supporting distribution elements until container loading and unloading activities are expected to support the existence of the CBL so

that Cikarang Dry Port's business can benefit and reduce dwelling time at Tanjung Priok Port.

### **W-O STRATEGY**

#### **Conduct large-scale promotions inside and outside the Cikarang Industrial Area (W1, O10, and O7).**

One of the weaknesses of Cikarang Dry Port is that promotion has not been optimal (W1) because Cikarang Dry Port has just started running its business as new, that is in 2011 and until now still innovates related to port services. The promotion has several dimensions, namely advertising, sales promotion, building relationships with the public and direct marketing (Handayani and Dedi, 2017). Cikarang Dry Port needs to optimize the opportunities that exist by participating in each conference relating to the logistics system, innovation and those concerning the port to develop its business. Given the relatively high export and import (O6) activities in Indonesia, Cikarang Dry Port needs to promote the value added support for ports (O7) to attract the interest of logistic service users to use the Cikarang Dry Port service as a logistics destination port. The promotion strategy has been used by Wang, et al. (2011), in the context of competitive port comparisons.

#### **Encouraging the acceleration of the loading and unloading process from Tanjung Priok Port by using the logistics train lane (W3, W5, O1, O2)**

The dwelling time of Tanjung Priok Port in Jakarta has now reached 3.32 days. Reduce the dwelling time, there is a need for a breakthrough related to logistics distribution, namely by using a logistics train. By using a logistics train, business people are expected not to lose a lot of time waiting for container travel from Tanjung Priok to the destination, Cikarang Dry Port. Even though there is double handling (W3) due to the change of mode of transportation from container transport trucks to the train and vice versa, the average capacity can serve 20-30 containers per day with twice the departure time, morning and evening. In accordance with the

direction of the economic policy package 15 (O1), the acceleration of coal flow and the reduction of Dwelling time in Tanjung Priok Port will gradually improve along with the optimization of railways as a multi-modal transportation concept currently owned by the government (O2). However, the implementation of this strategy needs to negotiate with stakeholders (W5) which have important influences regarding logistics distribution and rail transportation (Derbie and Raimbault, 2016).

### **Promoting PPJK and truck service providers outside Cikarang to operate in Cikarang Dry Port (W1, W2, O7, and O4)**

The lack of PPJK and truck service providers (W2) due to nonoptimal promotion (W1) has encouraged Cikarang Dry Port to plan strategies that will support port activities from export and import activities (O4) in Cikarang Dry Port. The role of PPJK and the trucking service providers is vital especially for the connectivity of the main ports with supporting ports and users of logistics services (Tan, et al., 2018).

Integrated port connectivity depends on feeder service networks and global shipping networks (Wang, et al., 2016). So that by providing PPJK services, truck, and shipping services in one region, will be an added value for Cikarang Dry Port (O7).

### **Increase the capacity of empty container depots in Cikarang Dry Port and cooperate with container depot providers to open container depots in Cikarang (W4, W5, O4, and O5)**

The strategy of increasing the capacity of empty container depots in Cikarang Dry Port is the impact of the development of dry port businesses that are influenced by land use, investment climate and expansion capabilities both in capacity and location (Nguyen and Notteboom, 2016). The shortage of empty container shelters for export and import activities is an important problem in Cikarang Dry Port (W4). This resulted in the empty containers available in Cikarang Dry Port for export and import activities greatly influenced by the availability of empty containers in container depots around Tanjung Priok Port and it would take more time and costs

because they had to issue empty containers first and then bring them to Cikarang Dry Port for the process of loading for the process of exporting goods. As a port investment policy, Cikarang Dry Port needs to provide its empty container depot to support its port activities. However, the strategy of port management is highly dependent on policies made by stakeholders and the community (W5). The agenda for discussing strategies for increasing the storage capacity of empty containers need to pay attention to the spatial aspects and institutionality of the area (Witte, et al., 2016). If the ability of Cikarang Dry Port can meet the storage capacity of empty containers and synergize with supporting container depots around the port, loading and unloading activities will be more effective and efficient (Chengpeng, et al., 2018).

### **Regulate regulations related to minimizing waiting for time, delivery and loading and unloading processes (W4, W5, O4, and O5)**

Port activity is highly dependent on export and import activities (O4) in a country. Cikarang Dry Port as a port service provider depends on the role of Tanjung Priok Port as the main port that provides container logistics supplies. However, container flows originating from container terminals in Tanjung Priok are in line with their port activities which are considered very dense and take a long time regarding document management and dwelling time. Taking into account infrastructure and transportation modes that are available at this time, regulations need to be regulated regarding minimum waiting time until delivery from the loading and unloading process to the warehouse owned by container users. Regulations related to the minimum waiting time, delivery and container terminal loading and unloading processes need to be regulated given the negotiation process with stakeholders (W5) has a high urgency to reduce the dwelling time rate at the main port, Tanjung Priok Port. According to Zhan, et al. (2018), arrangements related to port regulation need to be planned by stakeholders, namely the government, the company and the community by considering five aspects, namely Terminal, policy and planning, activities from the port, logistics services and chain of



trade and other activities concerning port matters. It seen in Appendix 3 regarding port arrangements. This strategy can be implemented by considering the performance of an effective and efficient port loading and unloading service (Ulfany, et al., 2017).

### **ST strategy**

#### **Make a master plan related to Cikarang Dry Port (S2, S4, T1, and T2)**

In Indonesia, the master plan related to dry ports has not been regulated in certain regulations but is still subject to port regulations such as Ministerial Regulation No. 51 of 2015 concerning the Implementation of Sea Ports. Integrated Customs Service Area (KPPT), Presidential Regulation No. 32/2012 concerning the Master Plan for the Acceleration and Expansion of Indonesian Economic Development (MP3EI), and Presidential Regulation No. 12/2012 concerning the National Logistics System Blueprint. The Tanjung Priok Port in 2011 in collaboration with the Director General of Sea Transportation of the Ministry of Transportation and Japan International Cooperation Agency (JICA) has made a master plan related to the port development and logistics at Tanjung Priok Port. The master plan provides solutions to problems in Tanjung Priok, namely the lack of port facilities including the number of berths, yard space and cargo handling equipment, especially in handling containers for both international and domestic containers, insufficient water levels and space for basin drainage especially for ships large international containers and petroleum product tankers, excessive congestion on the port access road which causes delays in international container transportation and environmental burdens in urban areas around the Tanjung Priok Terminal that exist with port activities such as the spread of dust loads including coal and sand. To overcome these obstacles, the implementation of the Tanjung Priok Port Master Plan was launched in 2010-2030 with the development agenda of the Jakarta International Container Terminal (JICT), encouraging the construction of the Kali Baru terminal, construction of the Cilamaya container terminal, connecting railroad access between ports and container terminals and utilization of the Cikarang

Dry Port dry port (JICA 2011). The implementation of the Master Plan was carried out in three stages that is in 2010, the second phase in 2020 and the last phase carried out in 2030. Cikarang Dry Port as the first private dry port in Indonesia needs to consider making a master plan for the role, function and utilization of dry ports to support the activities of the national logistics system, especially with the impact of reducing dwelling time at Tanjung Priok Port and expansion in other regions. The availability of port capacity (S1) and dry port (S4) bureaucratic lines in Cikarang Dry Port is a factor that is the strength to make a master plan regarding dry port (T1) to support strengthening regulations in the port logistics sector specifically (T2). The strategy of drafting a master plan will strengthen the competency of the supporting sector of the port business and logistics in general (Segui, et al., 2016).

#### **Providing convenience to exporters (S3 and T3)**

Taking into account the volatile rupiah exchange rate (T3), Cikarang Dry Port needs to provide favorable options for customers, one of which is by providing convenience to exporters. Exporters themselves have provisions, namely commodities that are freely traded on the world market, goods which are regulated in the trade system and goods supervised by trade (Siregar, 2018). This is based on providing convenience to exporters as users of dry port services can be given in the form of price discounts, intensive provision and tariff adjustments (Mardaeka, 2014). Providing convenience to exporters can consider the comparison of container terminal rates (S3) which are the hallmarks of Cikarang Dry Port compared to container terminals at Tanjung Priok Port. As shown in Figure 1, the utilization of Cikarang Dry Port for port activities of exporters is still very small compared to the import activities of needs for industrial use in the Cikarang Industrial Zone and surrounding industrial areas. The Industrial Estate in Cikarang has recorded 34.46% of national foreign investment and accounts for around 22-45% of the national export volume. In 2008 several industrial estates in Cikarang recorded turnover of USD 35 billion and 70% of them were for the ex-

port market. Under these conditions, Cikarang Dry Port needs to encourage vigorous marketing and promotion activities, especially for companies that focus on the international export market. Within Jababeka Industrial Estate itself, which contributes to export activities, PT. Yamaha Motor Indonesia, PT. Mondelez and PT. Honda Spare Parts and other companies. These companies have entrusted to manage the export of their products to the Cikarang Dry Port so that the logistics delivery process is not interrupted by the dwelling time of port activities at Tanjung Priok Port. By considering facilities supporting strategies for exports from local production (Chang, et al., 2018)

### **Personal Approach to potential customers outside Jababeka Industrial Estate (S3 and T5)**

Dry ports in Indonesia are something that is still very new for the development of the national logistics system. Lack of knowledge about dry port (T5) is one of the obstacles owned by Cikarang Dry Port. To face these challenges Cikarang Dry Port needs to come personally to customers outside Cikarang. This is one of the choices for promotional activities (Sipayung, 2017) from Cikarang Dry Port. In Cikarang, there are seven industrial estates in Cikarang, including the MM2100 industrial area, Delta Silicon I, EJIP, BIIE, Jababeka I, Jababeka II, and Delta Silicon II. Industrial areas in the cities of Delta Mas and Delta Silicon II which are under the Lippo group. The existence of the industrial area will be an opportunity for Cikarang Dry Port to expand the market, especially outside the Jababeka industrial area. Comparison of terminal rates (S3) from Tanjung Priok Port with Cikarang Dry Port can be used as a promotion driver for industry players who use port services in their business activities. Cikarang Dry Port needs to form a special team to come to the company so that the information obtained by the company or industry players can be well conveyed. The offered aspects are the utilization and services of port services as a strategy to personally approach the company (Wahyuningsih, 2012).

### **WT Strategy**

#### **Frequently held socialization regarding dry ports (W1 and T5)**

The promotion carried out by Cikarang Dry Port is currently not optimal (W1) considering that many logistics service customers outside Cikarang do not know about the utilization of Cikarang Dry Port for their port activities. Cikarang Dry Port needs to design a promotional agenda to open up opportunities for logistics service users by holding a dedicated dry port socialization. Such as actively participating in forums on logistics and port both inside and outside the country so that more logistics service users are interested in using dry port services with the aim of seeking and getting the attention of logistics service users (Muljana, 2014). Lack of knowledge about value added from dry port (T5) both from the public and the attention of the government, encouraged Cikarang Dry Port to collaborate with supply chain communities and academics to provide knowledge about the utilization of dry ports as an alternative solution to logistics and port activities from problems in Tanjung Priok Port is a high waiting time. The socialization strategy related to dry port by prioritizing dry port utilization and service aspects needs to be encouraged with supporting value added the port itself (Wang, et al., 2011)

#### **Adjusting Logistics Train capacity from Tanjung Priok to Cikarang Dry Port (W5 and T6)**

The strategy of increasing the capacity of logistics trains from Tanjung Priok to Cikarang Dry Port and vice versa is due to the very small capacity of 25-30 boxes per day with the type of container which is 40 TEUs. This is because the railroad tracks are still single, so PT. KAI as the stakeholder (W5) and the owner of the railroad authority are expected to make additional rails double and refinement of the system open and close at the crossroads on the lane. At present, logistics train services to Tanjung Priok Port and vice versa are scheduled twice a day, morning and evening. Considerations for adding schedules to logistics trans-

port trains can be an agenda that needs to be appointed and benefits the users of logistics services. Moreover, the container terminal at Tanjung Priok Port (JICT) is intensively promoting New Priok (T6) as a container terminal at Tanjung Priok. The strategy to increase logistics train capacity is a logical choice in the midst of the competition. The superiority of the strategy to increase logistics train capacity in addition to reducing the level of carbon emissions affected by other land transportation modes such as container transport trucks (Lattila, et al. 2013), is also free from major road congestion.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusion

The condition of the company which showed a positive development with the increase in revenues and assets in the financial condition of Cikarang Dry Port needed to be included in the increase in service capacity utilization from Cikarang Dry Port itself. Cikarang Dry Port internal strength that can be utilized is the availability of dry port capacity that can be optimized. The weakness that needs to be watched out is that there are not many PPJK and truck service providers and empty container depots. Externally, opportunities for multimodal availability and internet utilization and smart device-based applications get the highest scores. Whereas the threat that must be watched out is JICT's New Priok business development and expansion regulations.

### Recommendation

Recommendation for further research can be examined, among others: conducting research on the performance of human resources in Cikarang Dry Port, research on the effectiveness and time efficiency of document management in Cikarang Dry Port and port service quality evaluation research in Cikarang Dry Port.

## REFERENCES

Chang, Z., Yang D., Wan Y., and Han T. 2018. *Analysis on the features of Chinese Dry Ports: Transport Policy*. Doi: 10.1016/j.tranpol.2018.06.008

- Chengpeng, W. Di Z., Xiping Y., and Zaili Y. 2018. *A novel model for the quantitative evaluation of green port development: A case study of major ports in China*. *Transportation Research Part D*. 61: 431-443.
- Cikarang Dry Port. *About Us*. [on line] cikarangdryport.com [August 15, 2017]
- David, F. R. 2009. *Manajemen strategis*. Sunardi D, penerjemah; Wuriarti P, editor. Penertbit Salemba Empat. Terjemahan dari: Strategic Management Concepts and Cases. Ed ke 12
- Derbie, J. and Raimbault N. 2016. *The port city relationship in two European inland ports: A geographical perspective on urban governance*. *Cities*. 50: 180-187.
- Handayani, M. and Dedi M. 2017. *Pengaruh promosi wisata bahari dan kualitas pelayanan terhadap peningkatan jumlah kunjungan wisatawan di Pelabuhan Muncar Banyuwangi*. *Jurnal Wira Ekonomi Mikrosil*. 7(2): 151-160.
- Haralambides, H. and Girish G. 2011. *The Indian Dry Ports sector pricing policies and opportunities for public-private partnership*. *Research in Transportation Economics*. 33: 51-58
- Ihsani, A. 2018. *Strategi peningkatan adopsi teknologi pencarian dan pemindahan aplikasi halal MUI di Kota Bogor*. Bogor (ID): Institut Pertanian Bogor.
- Jeevan, J., Chen S., and Lee E. 2015. *The challenges of malaysian Dry Port development*. *The Asian Journal of Shipping and Logistic*. 31 (1): 109-134.
- Lattila, L., Henttu V., and Hilmola OP. 2013. *Hinterland operations of seaports do matter: Dry Port usage effect on transportation cost and CO<sub>2</sub> emission*. *Transportation Research Part E*. 55: 23-42.
- Mardaeka. 2014. *Pengaruh strategi promosi perdagangan (trade promotion) terhadap penjualan snack kentang Piattos di wilayah Jabodetabek*. Bogor (ID): Institut Pertanian Bogor.
- Muljana, M. 2014. *Pengaruh promosi penjualan pupuk hayati rhizoplex PT. Borneo Patra Agro*. Bogor (ID): Institut Pertanian Bogor.
- Nainggolan, B. P. A. M. 2017. *Faktor-faktor determinan/ penentu penguasaan pangsa muatan angkutan laut barang ekspor oleh kapal kontainer berbandera Indonesia di Pelabuhan Belawan*. Bogor (ID): Institut Pertanian Bogor.
- Nguyen, L. C. and Notteboom T. 2016. *A multicriteria approach to Dry Port location in developing economics with application in Vietnam*. *The Asian Journal Shipping and Logistic*. 32 (1): 23-32.
- Parraga, M. M., Cancelas N. G., and Flores F. S. 2014.

- DELPHI-SWOT tools used in strategic planning of the Port of Manta*. *Procedia*. 162: 129-138.
- Rahajeng, K. H. 2016. *Cikarang Dry Port dukung penurunan dwelling time*. [On Line]. <http://www.beritasatu.com/ekonomi/391309-cikarang-dry-port-dukung-penurunan-dwelling-time.html> [September 30, 2018]
- Rangkuti, F. 2014. *Analisis swot teknik membedah kasus bisnis*. PT. Gramedia Pustaka Utama.
- Roso, V., Woxenius J., and Lumsden K. 2009. *The Dry Port concept: Connecting container seaports with the hinterland*. *Journal of Transport Geography*. 17: 338-343.
- Ruswandi, A. and Gartika D. 2013. *Strategi pengembangan investasi di sekitar pelabuhan perikanan tipe B di Jawa Barat*. *Jurnal Akuatika*. 4 (1): 89-101.
- Segui, X., Puig M., Quintieri E., Wooldrige E., and Darbra R. M. 2016. *New environmental performance baseline for inland ports: A benchmark for the European inland port sector*. *Environmental Science and Policy*. 58: 29-40.
- Sipayung, M. N. P. 2017. *Pengaruh bauran pemasaran terhadap ekuitas merek sampo eskulin kids*. Bogor (ID): Institut Pertanian Bogor.
- Siregar, I. C. 2018. *Strategi komoditas tomat Ovop untuk menembus pasar ekspor*. Bogor (ID): Institut Pertanian Bogor.
- Soemantadiredja, A. 2017. *Analisis adopsi inovasi aplikasi GO-JEK*. Bogor (ID): Institut Pertanian Bogor.
- Suyono, R. P. 2001. *Shipping: pengangkutan intermodal ekspor impor melalui laut*. Jakarta : Penerbit PPM.
- Syahbanu, D. 2014. *Analisis penanganan kargo ekspor komoditas hortikultura di Terminal Kargo Bandara Soekarno Hatta: Studi kasus PT. Jasa Angkasa Semesta Tbk*. Bogor (ID): Institut Pertanian Bogor.
- Tan, Z., Li W., Zhang X., and Yang H. 2015. *Service charge and capacity selection of an inland riverpoint with location dependent shipping cost and service congestion*. *Transportation Research Part E*. 76: 13-33.
- Ulfany, A. F., Wicaksono A., and Anwar M. R. 2017. *Kajian kinerja pelayaran general cargo Terminal Jamrud di Pelabuhan Tanjung Perak Surabaya*. *Rekayasa Sipil*. 11 (3): 245-252.
- Wahyuningsih, S. 2012. *Analisis SWOT untuk penentuan strategi optimalisasi infrastruktur*. *Buletin Pos dan Telekomunikasi*. 10 (4): 289-304.
- Wang, G. W. Y., Zeng Q., Li K., and Yang J. 2016. *Port connectivity in logistic network: The case of Bohai bay Chinna*. *Transportation Research Part E*. 95: 341-354
- Wang, K. and Hong W. C. 2011. *Competitive advantage analysis and strategic formulation of airport city development: The case of Taiwan*. *Transport Policy*. 18: 276-288.
- Witte, P., Wiegmans B., Braun C., and Spit T. 2016. *Weak link or strongest, node? Comparing governance strategies for inland ports in Trans National European corridors*. *Research in Transportation Business and Management*. 19: 97-105.
- Zhan, Q., Geerlings H., Makhlaoui A. E., and Chen S. 2018. *Who governs and what is governd in port governance: A review study*. *Transport Policy*. 64: 51-60.