

# The Role of Logistics Service Providers in the Distribution Channel of Imported Perishable and Processed Food Product to Java Island, Indonesia

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## Abstract

Today fierce competition has highly enforced the company to focus more on their core competency and has encouraged them to strengthen competitive advantage. This condition reinforces the role of logistics service providers (LSP) to help company run their supporting activities. This research aims to identify the characteristics of LSP and to analyze their role in the distribution channel of imported perishable and processed food products in Indonesia. Convenience sampling was employed as sampling methodology and in-depth interview was used to collect detail information from respondents including private stakeholders, port authorities, freight forwarder association and retailers. The research results show that the characteristics and size of the company affects the involvement of LSP in the distribution channel. The roles of freight forwarders (FF) extensively include pre-customs clearance, customs clearance and post-customs clearance. Furthermore, the role of FF considerably contributes to the ease of arranging international shipment. The role of distributor plays vital role in the tracking and tracing system and timeliness of distribution channel. Meanwhile, the role of FF and transporter is fairly low in encouraging track-able and traceable distribution channel. Further improvements are needed to encourage better distribution channel performance.

**Keywords:** Distribution channel, imported products, logistics, logistics service provider, supply chain management

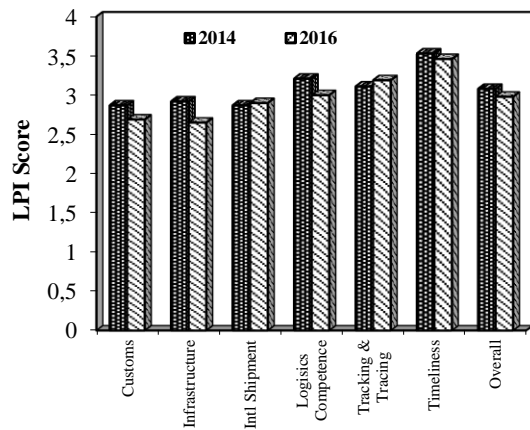
## 1. INTRODUCTION

In this globalization era, companies are required to be able to strongly compete in this fierce competition where core competency must be absolutely owned by every company. This core competency is the main strength and gradually creates competitive advantage for the company. In some cases, companies are more focused on upgrading their core competencies and giving the company's supporting activities to particular logistics services providers (LSP) or also known as third-party logistics (3PLs). Previous study revealed that 3PLs are contracted to supply integrated logistics services and are closely related to supply chain management (SCM). Efficient utilization of 3PL is expected to bring benefits such as reducing total logistics costs, focusing on its unique competency, avoiding substantial investment and giving value-added service to customers along the global supply chain (Wong

et. al., 2000; Rajesh et. al., 2010; Tezuka, 2011). Moreover, the main reason from the companies to be more focus on their main activity has encouraged them to give authority to 3PLs for undertaking other supporting activities. For example, an agro-industrial who fully focuses on the production process and manufacturing process may give authority to particular transporter or transport service provider to handle its transportation and distribution activity. By doing outsourcing, the companies can maintain their investment efficiently. According to Hsiao et. al. (2009), it is classified as execution level 1 of logistics outsourcing.

Geographical conditions of Indonesia provide opportunities and challenges for National logistics system. According to World Bank (2016), logistics refers to a series of services and activities, such as transportation, warehousing, and brokerage that help to move goods and establish supply chains across and

within borders. It means that export and import activities also affect the performance of National logistics system in Indonesia. Geographically, Indonesia has a direct access to the largest market in the world due to pass by the Sea Lane of Communication (SLoC) and it is a part of global container shipping line. It is opportunity for Indonesia to provide affordable and competitive mode for international trade. On the other hands, Indonesia comprises of over 17,000 islands which is pretty challenging to distribute the product throughout Indonesia. Inequality infrastructure is also an obstacle that complicates the process of optimal distribution in Indonesia. The declining in the quality of infrastructure is shown through the assessment of logistics performance conducted by the World Bank (Figure 1). Java, Sumatra and Bali Island are islands that have a fairly good infrastructure conditions and easy transportation access compared with such islands as Borneo, Sulawesi and Papua.



Source: World Bank (2016)

Figure 1. The Logistics Performance Index (LPI) score of Indonesia

For perishable products such as horticulture products, distribution activity is an important factor due to short shelf life and limited storage time of food product. Especially for imported processed food products, Indonesian government issued a policy through the National Agency of Drug and Food Control of Indonesia known as BPOM that it has to have shelf life at least two-third of the total storage time. Therefore, reliable distribution system is necessary. According to regulation of Ministry of Trade Republic of Indonesia No 73/M-DAG/PER/10/2014, the imported

processed food product may only enter Indonesia through a particular seaport or airport including Belawan seaport and Kualanamu airport in Medan, Tanjung Priok seaport and Soekarno-Hatta airport in Jakarta, and Tanjung Perak seaport and Juanda Airport in Surabaya. Moreover, the regulation of Ministry of Agriculture Republic of Indonesia No 42/Permentan/OY.140/6/2012 revealed that the entrance port for imported horticulture products is limited on the Tanjung Perak seaport, Belawan seaport, Soekarno-Hatta seaport and Soekarno-Hatta airport. Due to those challenges, most companies in Indonesia who import the perishable and processed food product prefer to use logistics service providers to help them accelerate importation process and distribution process throughout Indonesia. Then, it may strengthen the role of service providers in Indonesia.

This paper discusses about the role of logistics service providers including freight forwarder (FF), transporter and distributor in the distribution channel of imported perishable and processed food products to Java Island, Indonesia. The aim of this research is to identify the characteristics of those logistics service providers and to explain their role in the distribution channel of imported perishable and processed food products.

## 2. MATERIAL AND METHODS

The data collection employed direct interview through convenience sampling as sampling methodology. The respondents were private stakeholders who collaborate with logistics service providers to support their logistics activities (importer, freight forwarder, and manufacturer), port authorities, freight forwarder association and retailers. In-depth and direct interview with 9 importers and manufacturers, 6 freight forwarders and 7 distributors allowed this study to collect rich and deep information about the current role of each logistics service provider. This research focused on Jakarta and Surabaya city where the main seaport and airport facilitating importation process are located. The main reason for choosing both cities was the portion of container port traffic in Indonesia. Data from The Organization for Economic Co-operation and Development (2012) reported that 89% of Indonesian import and export was through

Tanjung Priok, Jakarta and Tanjung Perak, Surabaya. The direct interview was undertaken from May 2015 to March 2016.

### 3. RESULTS AND DISCUSSION

#### 3.1 The Role of Freight Forwarder

The roles of freight forwarder (FF) are extended not only on customs clearance but including also pre-customs clearance and post-customs clearance. The interview results show that most of importers give authority to FF to help them complete administrative matter and customs clearance, while they just prepare the required document before giving it to FF. Unclear and inefficient importation procedures in Indonesia are the reason for importers to use the services from FF. The importer thus can be more focused in carrying out its main activity. For processed food and perishable products, pre-custom clearance mostly relates to acquiring the permit documents from BPOM. According to Indonesia policy, each Stock Keeping Unit (SKU) of imported processed food product in retail packaging must have imported product registration number known as ML number issued by BPOM. Lead time for acquiring ML number is varied depending on the product risk. The high risk processed food product such as canned food takes longer time than low risk processed food product such as beverage, snack and instant noodle due to the detailed document and laboratory investigation. Based on in-depth interview conducted by Tanuputri *et al.* (2016), it may take up from 14 days to 2 years for the importer to get ML number because of inadequate sample received by importer and BPOM and also administrative reasons.

Currently, Indonesia government has developed Indonesian National Single Window (INSW) to accelerate the importation process by integrating government agencies with private stakeholders such as importer and FF. However, INSW is not fully integrated since only particular documents and feedbacks that can be accessed through INSW. INSW is currently focused on customs clearance, not on pre customs clearance yet. Although the customs clearance is not directly under FF's control, the role of reliable FF significantly affects the customs clearance time. Based on in-depth interview, the closeness relationship between FF and Customs can simplify the

customs clearance process where good track record of FF and trust are the keys in the relationship of both parties.

There are three types of FFs: multinational FFs, National FFs and Local FFs. Generally, multinational FF has headquarters in Jakarta and has branch offices in several major cities in Indonesia such as Surabaya. Since its system is globally integrated, IT system used by multinational one is more advanced than the National and Local FFs to support the communication and sharing of information among branches around the world. Therefore, the advantage of multinational FF is the ease of communication and arranging shipment or delivery of products from the country of origin to Indonesia. National FFs generally have branch offices in several major cities in Indonesia such as Jakarta and Surabaya. Some large-size National FFs facilitate communication between importers and overseas traders in terms of shipment booking and delivery schedule. They also have quite a lot of fleet so that they act as transporters as well. In addition to facilitating customs clearance, they offer delivery and/or distribution task throughout Indonesia. A client for instance in Makassar, Sulawesi asks FF to handle all Customs issues of imported product in Tanjung Priok Port, Jakarta, then asks to deliver it to Makassar by sea transportation. So, after all the matters of Customs are completed, FF arranges the transportation schedule to ship the product from Tanjung Priok Port, Jakarta to Soekarno Hatta Seaport, Makassar.

Furthermore, a significant difference between national and local FF is the size of company where most of Local FFs are classified as medium company, do not have any branches in other city and do not have huge number of transport fleet. They frequently outsource from logistics service provider to help delivery task. For example, they handle customs clearance in Tanjung Priok Port, Jakarta and they may collaborate with transport provider if they need to send the product to outside Jakarta. Otherwise, for National FF who also acts as transporter, they may facilitate the client with delivery task using inland transportation. Wisner *et al.* (2009) described that intermodal transportation makes the movement of goods much more convenient and efficient. Most large logistics service companies today offer one-stop and door-to-

door shipping capabilities to meet customer requirement. This condition indicates that the role of Indonesian FF is expanded and the evolution of its role has been existed.

### 3.2 The Role of Transporter

The quality in transportation is helping to realize the delivery commitments in quality and time by avoiding the loss of goods (Bowersox *et. al.*, 1999). Transportation is important in the logistics operation. Performance attribute of transportation consists of fleet capacity, optimum distance travelled, efficiency of the vehicle drivers, loss of goods during the delivery of the goods, and relocation rate (Kayakutlu and Buyukozkan, 2010). Transporter is one of the logistics service providers in this research since most of the small and medium FFs will hire transporter for the delivery task. However, several large FFs also act as the minor transporter to support their delivery task. They invest on the transport fleet and also cold chain system for particular product. Cold chain management is necessary because most of their customers are large company or multinational company in food industry. In-depth interview shows that the large transporters in Jakarta and Surabaya generally provide GPS as tracking system but not the cold chain system, unless they specialize themselves in food products. Limited number of transporter who provides service on cold chain management is an obstacle faced by the importer and manufacturer to maintain their product during delivery. However, large FFs who also act as transporters have employed cold chain management. For the small and medium transporter, they will neither provide GPS nor cold chain system. They need to outsource to other special transporter who provides those special requirement. Moreover, as the major religion in Indonesia is Moslem, the availability of transportation that specializes handling Halal food is limited. As for processed food products, transporters deliver halal foods using the same truck as non halal foods but they put separator in their truck.

Identification of desirable transportation modes and 3PL service available attempt to minimize logistics cost and improve customer service along the supply chain. Those cost reduction originates mainly from better utilization of capacity and better capital

allocation. Transit-time reliability, transportation rates, total transit time, willingness to negotiate rates and service, damage-free delivery frequency, financial stability, use of electronic data interchange (EDI) and willingness to expedite deliveries are the important selection factors (Wisner *et. al.*, 2009; Hsiao *et. al.*, 2009). In this research, FF, manufacturer and distributor are the service users of transporter. The only difference is how far are the collaboration between the transporter and those service users. The collaboration between distributor and transporter is frequently incidental due to lack of transport fleet in distributor. Otherwise, the collaboration with FF and manufacturer is more intense and fixed, especially for FFs that do not have transport fleet for delivery task. It aims to find the most appropriate transportation mode or 3PLs service and make good economic sense. Transporter typically support the small businesses to handle many of their shipping needs or help trucking companies to find a back-haul job.

### 3.3 The Role of Distributor

In this research, distributor is classified into main distributor, sole distributor and sub-distributor. Sole distributor here is subsidiary company of a large manufacturer, considered as importer producer, which have an authority and license to distribute all products manufactured by the company. Therefore, all products from the manufacturer are only distributed by its sole distributor and this model is called vertical integration. Based on in-depth interview, type of product affects the role of the distributor. For example, imported cooking spices for a local restaurant in Jakarta is directly distributed by an importer or an authorized FF not a distributor because of the small product volume, while in fast moving consumer goods (FMCGs) either main distributor or sub-distributor are required for helping the importer in the distribution task. Importer also uses direct delivery if the product is urgently needed.

In-depth interview indicates that some large manufacturers being considered as importer producers in Jakarta have a subsidiary company as their sole distributor. Generally, those sole distributors will have a distribution branch in greater Jakarta (known as Jabodetabek) and the main city in Java

including Surabaya. Otherwise, in the small city outside the main city, they will assign sub-distributor to distribute the product throughout Indonesia. In addition, many general importers own a central warehouse in Jakarta and have distribution branches in the main city in Java including Surabaya with the warehouse facility. Many importers also act as the distributors, exclusive agents or consolidators, while few retailers are also importers but they are not responsible for any logistics activities. Hence, the distributor in Jakarta commonly is the distributor acting as central warehouse, while the distributor in Surabaya is distribution branch or sub-distributor. For packaged products, both distributors in Jakarta and Surabaya will not use cold chain system unless their products are fresh products.

**3.4 The Role of Logistics Service Providers to Distribution Channel Performance**

To assess the role of logistics service providers toward distribution channels, the performance components are determined based on the LPI component by World Bank. Those LPI components include customs performance, infrastructure quality, ease of international shipment, quality of logistics service, tracking and tracking ability, and timeliness of shipment. Performance components used in this research are international shipment, tracking and tracing, and timeliness. All those three components are selected because according to World Bank (2016), those are categorized as supply chain performance outcomes among six LPI components. Sub-component are further determined based on in-depth interview and literature study. The assessment is presented in Table 1.

From the below table, role of distributor is quite good on providing easiness to arrange competitively priced shipment. Regular communication and continuous collaboration between distributor with client (i.e. importer, manufacturer or holding company) and retailer indicates good integration system. FF also plays vital role in international shipment, but poor bureaucracy system is still a major obstacle. On the other hand, the role of transporter to international shipment is relatively low due to the lack of integration between the transporter and its client. In addition, the role of distributors in creating

track-able and traceable system is well proven by the efforts of distributors to provide track-able and traceable service. Either advance or customized IT system supports the delivery task in distributor’s stage. For distributors, these components are necessary because they have a huge number of SKUs and should deal with target of product sales, so tracking and tracing systems help to manage inventory and reduce obsolescence risk of perishable products.

Table 1. The Assessment of Role of Logistics Service Provider

Component	Sub-component**	Average Score (1 – 5)		
		FF	T	D
International and national shipment***	Integration	4	1	3
	Easy of bureaucracy or SOP	2	4	4
Tracking and tracing*	Traceability	2	1	4
	Tracking ability	2	3	3
	IT systems support	3	2	4
Timeliness*	Reliability	2	3	4
	Responsiveness	2	4	3
	Flexibility on delivery schedule	2	4	3

Notes:  
 \*based on LPI World Bank  
 \*\* based on analysis of author  
 \*\*\*with slightly modification  
 FF : freight forwarder, T : Transporter, D : Distributor  
 Range score: 1 : very low; 2 : low; 3 : fair; 4 : high; 5 : very high  
 Assessment was conducted on 6 freight forwarders, 3 transporters and 7 distributors

Otherwise, the role of FF and transporter is still fairly low in encouraging track-able and traceable distribution channels. This is because the facilities and infrastructures to support tracing activity in both parties are not yet properly available and it is limited on tracing data of client (importer, manufacturer, and FF). However, the application of tracking system in FF and transporter is sufficiently massive and considered necessary although the majority of FF and transporter still use manual tracking system (communication by phone to track the position of consignment). They think that the real time tracking system i.e. GPS is not a requirement of their service users. Advanced

tracking system is limited to multinational or national and large scale company.

In terms of timeliness, transporter and distributor have high average scores because most of them specialize themselves on delivery task and it becomes their core competency. Meanwhile for FF, delivery task is not their core competency. So, the FF that does not have transport fleet will rely on transporter as a third party. This results in low reliability, responsiveness and flexibility on delivery. Transporter and distributor thus play an important role on the timeliness of the distribution channel.

## CONCLUSION

Focus on core competency is one of the reasons why companies involve logistics service providers in their logistics activities. Currently unclear bureaucracy system and inefficient importation procedures in Indonesia are major reasons for importers to use customs clearance service from FF and it successfully facilitates importer in pre-customs clearance, customs clearance and post-customs clearance. In addition, characteristics and size of company may determine the contribution of logistics service provider's role in the distribution channel. Majority of FFs give delivery task to transporter to control their investment. Meanwhile, FFs who invest on transport fleet also act as transporter to balance their investment. It means that investment become one of the consideration for FF to determine the involvement of transporter in their business. This research also concludes that transporter likely to be logistics service provider for FF and distributor. The collaboration between distributor and transporter is frequently incidental due to lack of transport fleet in distributor, while the collaboration with FF and manufacturer is more intense and fixed. Furthermore, FF and distributor play an important role in the international shipment. By improving bureaucracy system and strengthening integration, it can encourage better distribution channel of imported perishable and processed food product. The role of FF and transporter is fairly low in encouraging track-able and traceable distribution channels, while transporter and distributor play vital role on the timeliness of the distribution channel. Therefore, FFs and

transporters should encourage practice of track-able and traceable delivery as their standard service in the near future.

## ACKNOWLEDGEMENT

We would like to show our gratitude to the Department of Agro-Industrial Technology Management, Faculty of Agro-Industry, Kasetsart University, Thailand for supporting and supervising this research. We are also grateful to Department of Agro-Industrial Technology, Faculty of Agricultural Technology, Universitas Gadjah Mada, Indonesia for its guidance during data collection. Less but not least, the authors also acknowledge all the respondents for their helpful cooperation during data collection.

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