



## **Improving the Role of PD. Pasar Surya in the Supply Chain Strategic Commodity Framework in Surabaya City (Synergizing Local Government Business Units, Private Sectors and Traders)**

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### **ABSTRACT**

Food sufficiency is a basic human need so that food availability for the people must always be guaranteed at an affordable price. The increasing public demand has led the price to increase as a result of demand pull inflation. The growing population and economic development has resulted in the degradation, conversion and fragmentation of agricultural land which may ultimately threatens food security that will push up the price of foods. PD. Pasar Surya is one of the business of local government of Surabaya. The unit is expected to have strategic role in supply chain management (SCM), so that it can realize price stability and food availability guarantee. This study aims to provide recommendations related to the increasing role of PD. Pasar Surya within the framework of supply chain of strategic commodities in Surabaya city. It used structure, conduct and performance analysis. Results show that currently the role of PD. Pasar Surya is still limited to the provision of infrastructure facilities and has not accommodated the SCM, so that the development of strategic commodity prices is quite volatile with an increasing trend. PD. Pasar Surya is recommended to immediately synergize among all stakeholders through the management of information, goods and services from the earliest suppliers to the latest consumers.

**Keywords:** Supply Chain, PD. Pasar Surya, Food Availability, Price Stability, Structure, Conduct and Performance

**JEL Classifications:** E31, Q18

### **1. INTRODUCTION**

The role of the city government in the interests of the people in the field of economy is realized through local government business units known as mandated by the State constitution. The implementation remains within the framework of philosophy that sides with the public interest so that it could fulfill the welfare of society. This statement be found in the 1945 constitution of the State of the Republic of Indonesia, as article 33 paragraphes (2) and (3) affirm that the production branches that are important for the state and which affect the livelihood of the people are controlled by the state while the earth and water and natural resources contained therein are controlled by the state and are used for the greatest prosperity of the people. One important aspect in achieving people's prosperity is in the field of food.

Food sufficiency is a basic human needs problem so that the food supply for people in Surabaya must always be guaranteed with reasonable price. Particularly with regard to the efforts on how to increase the needs of the increasing community that has led to price increases as a result of demand pull inflation. This condition has prompted the Government of Surabaya city to immediately take strategic steps to implement price stabilization. The increasing population and economic development resulted in the degradation, conversion, and fragmentation of agricultural land that could ultimately threaten food security which pushed the price of staple food at a high enough level.

Some of the current strategic commodities have high prices and are a major contributor to inflation. Inflation in Surabaya during the period of 2017 showed an increasing trend. In January 2017 inflation stood at 4.27%, then rose to 4.55% and reached 4.91% in

June 2017 (Figure 1). In terms of expenditure groups, the largest annual inflation rate is in foods and finished foods, beverages, cigarette and tobacco categories. Especially for food commodities, the biggest contributors of inflation are meat and its derivatives and other food ingredients such as fat and oil.

PD. Pasar Surya is a local government business units of Surabaya city is expected to take strategic steps in terms of food logistic management so as to keep the price stability at the level that can be reached by the community. One of the policies that can be done is through the synergy of local government business units, private sector, and traders in the supply chain management (SCM) framework, especially for basic commodities are goods that affect the livelihood of the people, are prone to turmoil, the dominant contributor to inflation, and determine the welfare of the community. Strategic commodities are goods that play an important role in determining the smoothness of national development. Goods in strategic groups are special commodities where governments can intervene in the markets to ensure stock availability, stabilize prices to reach all levels of society, and reduce price disparities between regions. The synergy of goods in this group must be realized.

This synergy is expected to empower the community in service delivery in the field of food, and can create healthy competition. Thus, private business sector and government can work more professional and efficient. According to Habib (2011) for it is necessary SCM to:

1. Shortening the distribution chain of goods, especially in the city scale.
2. Creating a key commodities logistics system capable of enhancing the competitiveness of local products in both the domestic market, regional markets and global markets.
3. Guarantee the availability of goods, the ease of obtaining goods at affordable and stable prices, and narrow the price disparity between regions in Surabaya.
4. Streamlining the flow of goods distribution from outside the city into the city of Surabaya.
5. Reduce the cost of distribution of goods in the presence of an efficient logistic hub system.

To ensure the realization of SCM planning in Surabaya city, it is necessary to increase the role of PD. Pasar Surya within the framework of strategic commodity supply chain in Surabaya City. Such roles can be realized through the synergy of regional,

private and merchant enterprises where they form a unity within the supply chain. This analysis is quite important considering PD. Pasar Surya is currently only as a provider of means of expansion so that in need new policy model where PD. Markets should have a significant role in the process of improving food logistics so that the input of this review will be an important input in the policy-making process.

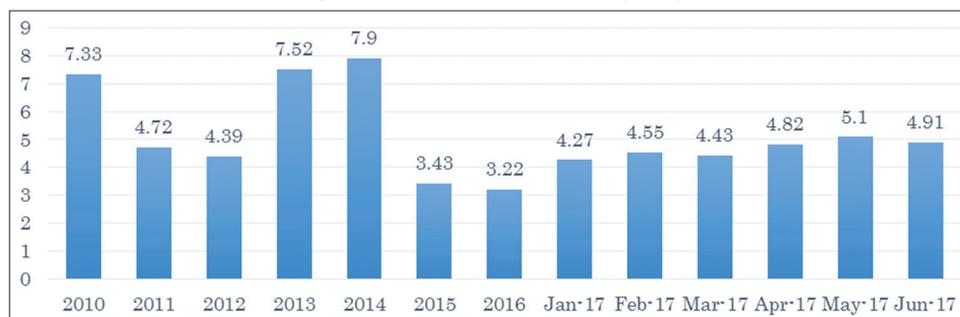
Based on the above description of the purpose of this study is to recommend policies related to the increasing role of PD. Pasar Surya within the framework of strategic commodity supply chain in Surabaya city. This can be achieved by understanding the development of commodity price availability and development, to further stipulate the policy of supply chain planning in Surabaya, the last is the formation of the role model of PD. Pasar Surya within the framework of strategic commodity supply chain in Surabaya city.

## 2. LITERATURE REVIEW

Supply chain is a network of companies that work together to create and deliver a product into the hands of the end user, in this case is the consumer (Gibson et al., 2005). The involved actors usually include suppliers, manufacturers, distributors, stores or retailers, as well as support companies such as logistics services. Chopra and Meindl (2007) argue that SCM is the management of information, goods and services from the earliest suppliers to the latest consumers using an integrated system approach with the same goal. Based on that, then the basic principle of SCM there are 5 things, namely:

1. Integration principle, it means that all the elements involved in SCM are in one compact unit and aware of the interdependence.
2. Networking principle, it means all elements are in a harmonious working relationship.
3. Edge to edge principle this means that the operation process includes the most upstream suppliers to the most downstream consumers.
4. The principle of dependence, every element in SCM realizes that to achieve the competitive advantage requires mutually beneficial cooperation.
5. Principles of communication, this means the accuracy of data into blood in the network to be accurate information and materials.

Figure 1: Inflation rates in Surabaya city



Source: Statistics Central Bureau of Surabaya city (2017)

Mentzer et al. (2001) describes seven principles in SCM that are used in formulating strategic decisions:

1. Customer segmentation based on their needs
2. Adjusting the logistics network to serve the needs of different customers
3. Listening to market signals and making those signals as the basis for planning needs so as to produce consistent forecasts and optimal resource allocations
4. Product differentiation at a point closer to the consumer and accelerate its conversion along the supply chain
5. Managing strategic supply sources to reduce the cost of material and product ownership
6. Develop a technological strategy for the overall supply chain that supports decision-making hierarchy and provide a clear picture of the flow of products, services and information
7. Perform performance measurement for an entire supply chain with a view to improving service to end consumers.

The concept of supply chain implementation in order to ensure price stability and supply availability has been done by some previous researchers. Morana and Gonzales-Feliu (2010) concluded that the success of the SCM system relies heavily on the synergy of relevant stakeholders namely government, employers, traders and buyers. Ville et al. (2012) state that the subjects of urban logistics include both the government and private sectors, where each business actor has a weakness if it should be done independently without adequate system logistics. It is therefore necessary to synergize among stakeholders to minimize the existing problems.

Kiekintvelda et al. (2009) assert that based on logistics management management function, the researcher concludes that logistics management is one strategy to maintain price stability in terms of control function. This means that logistics management can mean to control the supply and demand of food needs desired by the community. The results of this study are in line with Harianjaa and Hasibuan (2009) who shows that the existence of information systems in SCM for horticultural products is absolutely necessary, so that each actor in the supply chain, obtaining the optimal portion of the business issued and ensured the product in the market, types of products in a region so that the price will be obtained reasonable and a strong bargaining position for farmers.

### 3. RESEARCH METHOD

The research methods used in this study include descriptive statistics analysis and also analysis of structure, conduct and performance (SCP). Descriptive statistics analysis is used in order to analyze: (1) Condition of development of availability and development of strategic and principal commodity prices in Surabaya, (2) general policy of supply chain planning in Surabaya city. Further formulation of the improved PD. Pasar Surya role model within the framework of supply chain strategic commodities in Kota Surabaya use SCP approach. This approach is adapted from Muslim et al. (2008). Structure: Refers to the pattern of functional relationship between one and other phenomena in the unit of activity. Disclosure of institutional structures is based on the following variables.

1. Background of institutional emergence? What drives the emergence of institutions?

2. Positioning in institutional organizational structure, stewardship cycle up to the formulation of duties and functions of the institution.
3. Strength, weakness, opportunity and threats (SWOT) analysis for each alternatively prepared option.

Conduct means showing the organization's behavior in running the organization's management. How then this behavior affects the business environment, social and also environment. Performance means demonstrating the achievements to be used as a measure of success over organizational/institutional choice.

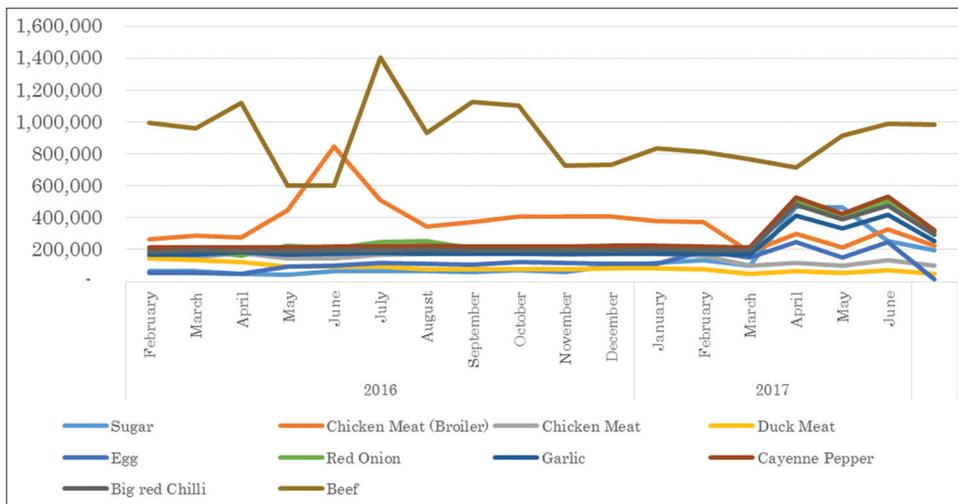
The scope of this study is limited to the area of Surabaya city. The total area of Surabaya city is about 52.087 Ha, which is administratively divided into 31 districts and 154 sub-districts. The types of data used include primary and secondary data. Primary data in this activity is done through the focus group discussion method with relevant stakeholders to explore all the information needed in the preparation of the study. Sources of information involved among others are PD. Pasar Surya, Surabaya Urban Development Planning Agency, division of economic affairs and regional business and trade service. Secondary data used include food availability data, food price development data, supply chain planning data in Surabaya city: Profile of PD. Pasar Surya, and Surabaya's macroeconomic data in 2011-2016. Primary data source is derived from office of Statistics Central Bureau of Surabaya City, East Java Statistics Central Bureau, development planning board, food security and agriculture Department of Surabaya city and Administration Division of Economy and Regional Business.

### 4. RESULTS AND DISCUSSION

The most basic need for a nation's human resources is food. The availability of food in sufficient quantities and qualities is required in achieving food security. Another factor that is important in achieving food security is the availability and distribution of food that is affordable from the side of the price and safe for people to consume sufficient energy needs in daily activities. Thus, the local government business units as part of the city government, should have an important role in ensuring the availability of goods, including in it to maintain price stability.

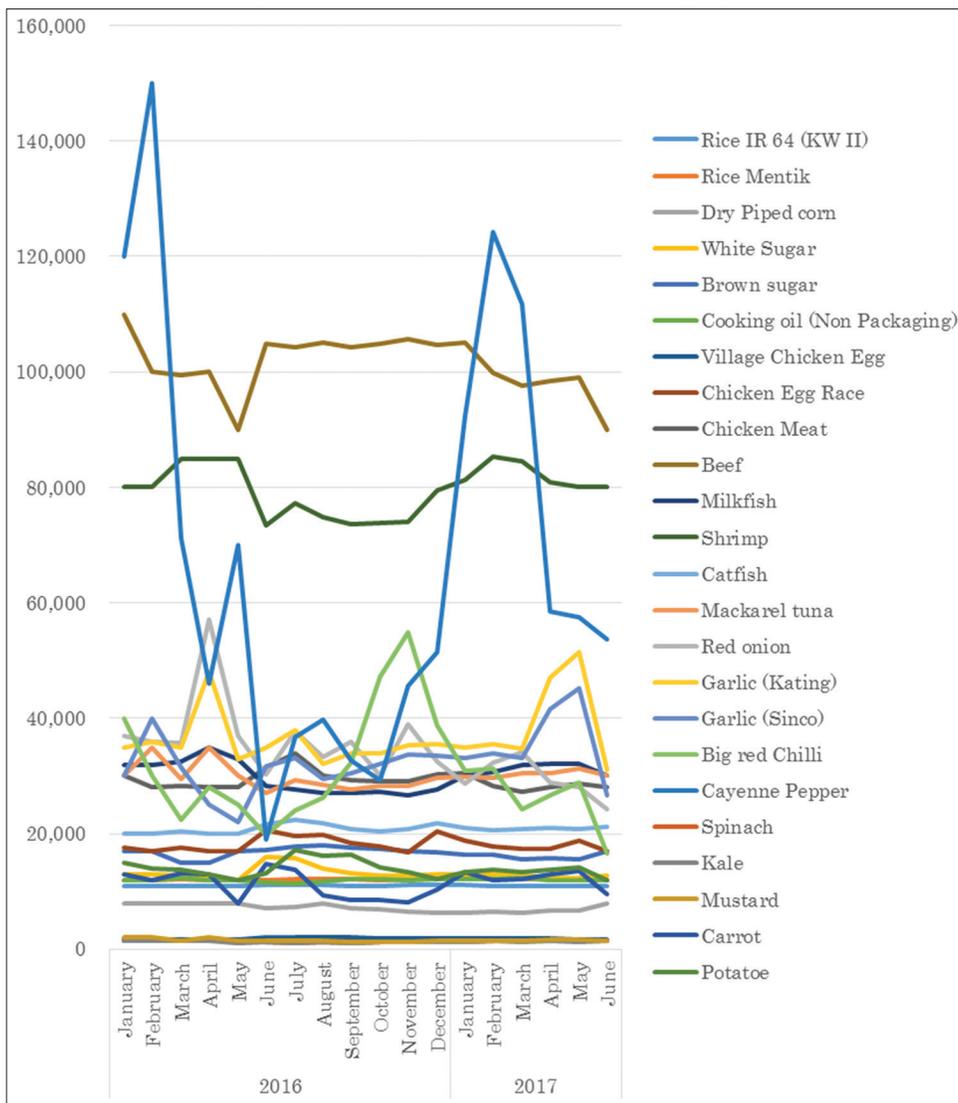
The development of food supply in Surabaya city is generally quite stable such as sugar, garlic, onion, large chili, cayenne pepper, chicken eggs, duck meat but for beef and chicken commodities fluctuate. Based on data from the Department of Food Security and Agriculture of Surabaya city, the availability of fluctuating foods such as beef and chicken meat. The availability of beef in January 2016 was recorded at 992,500 tons, then decreased in December 2016 to 836,800 tons. For June 2017 the availability of beef was recorded at 986,000 tons, and the availability of chicken meat in the same month was recorded at 97.513 tons. These fluctuations are caused by several factors such as market demand conditions and some food commodities that depend on the current season. Detail of the numbers is shown in Figure 2, whilst Figure 3 depicts the price movement of basic material.

**Figure 2: Food Availability in Surabaya (Ton)**



Source: Food Security and Agriculture Department (2017)

**Figure 3: Price movement of basic material (Rp/Kg)**



Source: Division of Administration of Economy and Regional Business (2017)

Furthermore, the development of food prices in Surabaya showed a fairly fluctuating movement pattern, and even some commodities experienced a significant price increase. These commodities include cayenne pepper, beef, onion-garlic, granulated sugar and also chicken eggs. Based on data obtained from the administration division of economy and regional enterprises, the price of cayenne pepper in January 2016 was Rp. 120,000/kg then dropped at the lowest point of Rp. 18,932/kg in June 2016. In December 2016, the price of cayenne pepper rose again to Rp. 51,415/kg and in June 2017 it was recorded at Rp. 53,750/kg. For garlic commodity, in January 2016 was Rp. 35,000/kg then rises at the highest point to Rp. 48,000/kg in April 2016. In December 2016, the price of garlic fell back to Rp. 35,493/kg and in June 2017 it was recorded at Rp. 31,000/kg or decreased from the previous month (May) with the price reaching Rp. 51,458/kg.

Price fluctuations as well as the availability of strategic commodities as mentioned above require immediate interventions. One of the interventions that can be done is by applying SCM where local government business units as part of Surabaya city government must take strategic role in food logistic management so that it can keep price stability at level that can be reached by society. Management supply chain is also beneficial in terms of increasing the synergy between local government business units, private and traders through the principle of integration.

Currently, SCM has not been implemented integratively but has been included in the medium-term urban planning (MTUP). In the MTUP of Surabaya 2016-2021, the missions listed in the Surabaya city mid term development plan 2016-2021 are related to city logistic, one of which is realizing Surabaya as a center of inter-island and international inter-island trade and services. The policy directions chosen in logistics activities in Surabaya are (1) to increase access/supporting facilities and infrastructure to the logistics and distribution activities in the city and (2) development of SCM information system and management needed to integrate the components and activities in the logistics system.

#### 4.1. Grand Design of SCM Planning in Surabaya

The city's supply chain logistics development and development plan is carried out through three main stages. The three stages include (1) stabilization/development/development of the central node logistics activities, (2) institutional and management of the central nodes of city logistics activities, and (3) the management of city logistic hub scale the city. Detail of the proposed design is shown in Figure 4.

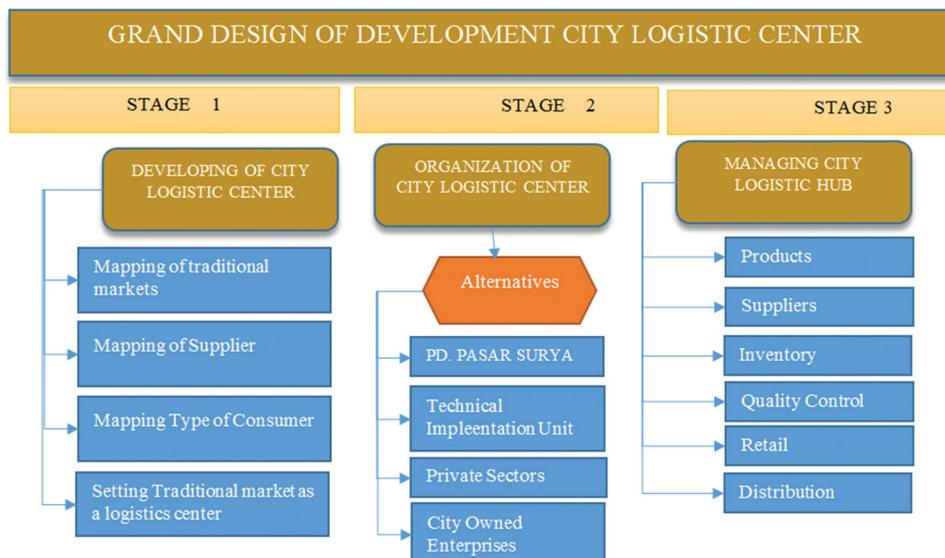
In the first stage, mapping of traditional market is carried out of which this followed consecutively by origin/supplier mapping, destination/consumer mapping, and traditional market mapping. In this process mapping of consumer behavior could include (1) end customers, (2) design, and (3) Kiosk/retailers/stalls. There is also a need to make an analysis and evaluation of mapping of distribution facilities (traditional market) in city logistic hub management in Surabaya city. Analyzes conducted in the form of analysis of strengths, weaknesses, opportunities and threats, and traditional market determination as a central node hub logistics activities. In this second phase, local government business units institutional evaluation is conducted in running SCM activities in Surabaya city. The third stage is arranged city logistic hub management system covering product/commodity management, supplier, inventory, quality control, retail, and distribution by synergizing all related stakeholders.

Increased the role of PD. Pasar Surya within the framework of supply chain of strategic commodities in Surabaya city through synergizing local government business units, private sectors, and traders.

To ensure the realization of SCM in Surabaya, it is necessary to increase the role of local government business units in this case PD. Pasar Surya. Thus, in carrying out its activities PD. Pasar Surya aims to:

1. Providing services to the public in accordance with the scope of its business, namely the field of business operations,

Figure 4: Grand design of supply chain management planning in Surabaya city



**Table 1: SWOT analysis of PD. Pasar Surya**

Aspects	Strengths/opportunity	Weaknesses/threat
Human resources	Highly experienced in the field of trade business, among others, in terms of establishing, building, and/or managing the market, and cooperating with third parties primarily in the field of market services The amount of human resources that can be involved is now available	Current resources do not have skills in terms of supply chain management of basic goods and strategic, given the personnel involved in accordance with the needs based on the authority, task and function PD. Pasar Surya as stated in local government regulations
Organization	Institutionally, the existing organization has been formed so that there is no need to form a new organization	-
Possibility to achieve the goals set by the Government of Surabaya city	PD. Pasar Surya is to provide services for public benefit by earning profits based on the principles of corporate management. It market should also be able to provide benefits for the Surabaya city government that include Providing services to the public in accordance with the scope of its business, namely the field of business operations Increasing local revenues Increasing the guarantee of food availability, especially for strategic and basic commodities Able to guarantee price stability especially for strategic and principal commodities and Participate and carry out regional development	-
Budget required for establishment of new institutions/divisions	Cheap, because the organization already exists with all its components	-
Regulasi	Existing regulations governing the organization of BUMD is already available that refers to the Regional Regulation of Surabaya city No. 6 of 2008 concerning the PD. Pasar Surya	Require revision of local regulations for the implementation of organizational tools in accordance with the authority of new duties and functions
Time required to form a new organization	Fast, because it only needs to revise the local regulations and then can be run directly as the existing organization already exists	-

SWOT: Strength, weakness, opportunity and threats

2. Increasing local revenue,
3. Increasing the guarantee of food availability, especially for strategic and basic commodities,
4. Able to guarantee price stability especially for strategic and principal commodities, and
5. Participate and carry out regional development.

To achieve the aforementioned goals and objectives, the logistic institution in question is expected to carry out business activities as the following:

1. Establish, build, and/or manage the market,
2. Implement SCM in order to ensure the availability of strategic goods and maintain price stability through a series of activities in accordance with the principles of effective and efficient supply chain,
3. Cooperate with third parties, and/or
4. To undertake another business which is not contrary to the intent and purpose of the institution in question,
5. Establish, develop, and or manage the marekt.

Result of institutional analysis to PD. Pasar Surya indicates that the existing local government business units has no authority at all in the field of SCM. As stated in the regulation and in accordance with local regulation of Surabaya city number 6 of 2008 on PD.

Pasar Surya, the scope of business activity of PD. Pasar Surya are covering the following:

1. Establish, build, and/or manage the market,
2. Conduct business in the property sector,
3. Cooperate with third parties,
4. To engage in capital participation in other business entities, and/or
5. Undertake another business which is not inconsistent with the intent and purpose of PD. Pasar Surya.

#### 4.2. SWOT Analysis

PD. Pasar Surya has several strengths and opportunities that can be maximized to minimize the weaknesses and challenges. Here are the results of SWOT (Table 1) analysis of PD. Pasar Surya in an effort to increase the role of BUMD within the framework of strategic commodity supply chain in Surabaya city through sinergizing local government business units, private sectors, and merchants.

Based on the results of the analysis as above, some of the proposed strategies to be carried over by the government of Surabaya are described as follows.

1. Establishment of PD. Pasar Surya as logistic management manager of Surabaya City by conducting a review of main task

and function of PD. Surya Market. This is because PD. Pasar Surya already has a good experience in managing traditional markets, but the basic tasks and functions are not yet specific to manage the distribution of goods ranging from planning to the distribution of products to the end consumer (SCM). Up to now PD. Pasar Surya has to manage at least 67 markets and the Surabaya city Government has also built some that can be utilized in the supply chain process in Surabaya as a distribution channel.

2. Need to do coaching to human resources of PD. Pasar Surya related SCM. This is quite important considering PD. Pasar Surya has not mastered the flow of goods distribution in and out of Surabaya City. Thus, it needs to be given intensive guidance for SCM process. The principles of supply chain must be mastered completely from upstream to downstream. SCM principle is essentially synchronization and coordination of activities related to the flow of material/product, whether existing within an organization or between organizations. The main principle that must be held in synchronizing the activities of an SCM is to create greater resultant, not only for members of each chain but for the whole system (Zabidi, 2001).
3. In the framework of evaluation, supervision of PD. Pasar Surya as a logistic management body is recommended to be undertaken by the office of food and agriculture security and also the trade office of Surabaya. This supervision aims to maximize the purpose of the implementation of SCM of the city scale such as ensuring the availability of goods, the ease of obtaining goods at affordable and stable prices, and narrow the price disparity between regions in the city of Surabaya.
4. An integrated information system should be established to monitor the circulation and price stability of goods. This information system is expected to be a form of transparency and information to the public related to the circulation of goods and information on the price of goods applicable in the market throughout the region of Surabaya (East, West, South, Central, North).
5. It is necessary to establish a coordination forum between the Surabaya city government and other local governments known as the producers of foodstuffs and distributors of foodstuffs. The formation of this forum can also be a means of sharing information so as to facilitate the flow of goods distribution from outside the city into the city of Surabaya.

## 5. CONCLUSION AND POLICY RECOMMENDATIONS

This study is aims at finding the policy recommendations related to the increasing role of PD. Pasar Surya within the framework of strategic commodity supply chain in Surabaya city. This can be achieved by understanding the development of commodity price availability and development, to further stipulate the policy of supply chain planning in Surabaya. The last is the formation of the role model of PD. Pasar Surya within the framework of strategic commodity supply chain in Surabaya then the conclusion of this activity among others:

1. Plan of development and the development of the knot of city logistics activities begins with 3 stages, where Stage 1 is

stabilization/development/development of the central node logistics activities, Stage 2 is institutional and management of the central nodes of city logistics activities, and Stage 3 is city logistic hub management city scale.

2. Looking closely on the strengths, weaknesses, opportunities and threats, PD. Pasar Surya is an ideal institution to be a city-scale logistics management agency in Surabaya city. This is because PD. Pasar Surya already has good experience in managing traditional market, but the basic tasks and functions in PD. Pasar Surya are not yet specific to manage the distribution of goods ranging from planning to distribution of products to the end consumer (SCM).

The proposed policy recommendations from this study are:

1. Establishment of PD. Pasar Surya as the logistic management of Surabaya city by conducting a review of main task and function of PD. Surya Market.
2. Need to do coaching to human resources of PD. Pasar Surya related to SCM.
3. In the framework of evaluation, supervision of PD. Pasar Surya as a logistic management agency shall be handed over to the food and agricultural security and the trade office.
4. An integrated information system should be established to monitor the circulation of goods and price stability of goods.
5. It is necessary to establish a coordination forum between the Surabaya city Government and other local governments of producers of foodstuffs and distributors of foodstuffs.

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