SUPPLY CHAIN ANALYSIS ON UREA PSO (PUBLIC SERVICE OBLIGATION) AT PT PUPUK KALIMANTAN TIMUR

M. Syauqi Jazil
M. Kholid Mawardi
Fakultas Ilmu Administrasi
Universitas Brawijaya
Malang
Email: syauqijazil95@gmail.com

ABSTRACT

Supply Chain Analysis on urea PSO at PT Pupuk Kalimantan Timur is a study about the supply chain process conducted by researchers on a fertilizer company in Indonesia. This study is selected due to the issue of urea scarcity from the farmers in some areas. Therefore, it is necessary to conduct a research regarding the distribution process and supply chain on subsidized urea. This research aims to analyze and describe about: 1) Supply chain process on PSO urea product from the line I until line IV/ the final consumer. 2) Efficiency analysis from PSO urea supply chain on PT Pupuk Kalimantan Timur. This research uses descriptive method with qualitative approach and data collection done through interview and observation. The interview was conducted to PT Pupuk Kalimantan Timur, distributor, retailer, and farmers. Writing techniques was delivered by reduction method and data verification by qualitative approach from research location (field data), which determined in a complete and detailed report.

Keywords: Supply chain, urea fertilizer subsidy
INTRODUCTION

Today's business world continues to compete to create a growing range of consumer needs, and become more intelligent in choosing its needs. Starting from the middle to upper class always demand the best quality and economical price. The economy is experiencing significant changes, especially in developing countries such as Indonesia, which is increasing in both economic and development.

The rapid development of information technology, communications, and manufacturing processes resulted in the short lifecycle of the product. Therefore, every company will make every effort to improve productivity, efficiency, fast service, easy, and continue to create new innovations to stay ahead and stay in market. In addition to productivity and efficiency that need to be improved, the company must also understand and know what is needed by consumers.

Pujawan and Mahendrawati (2010) explained that the importance of the role of all parts from suppliers, manufacturers, distributors, retailers, and customers in creating cheap, quality, and fast products is what then gave birth to a new concept of Supply Chain Management. According to Indrajit and Djokopranoto (2005) the term supply chain was first used by some logistics consultants around the 1980s, then by academics analyzed further in the 1990s, the concept of supply chain management was born. Furthermore, Indrajit and Djokopranoto (2002) explains, in essence Supply chain management is the extension and development of the concept and meaning of logistics management, logistics management plays a role in regulating the flow of goods and supply chain as well but includes inter-company related to the flow of goods and growing Concerning the things required by the customer. According to Heizer and Render (2005), companies need to consider supply chain issues to ensure that the supply chain supports the company's strategy. If the operations management function supports the company's overall strategy, then the supply chain is designed to support the operations management strategy. Facilities and costs required to meet consumer needs, with the goal of achieving minimum cost and maximum level service are all considered in supply chain management.

The role of fertilizing is very important in order to increase productivity and agricultural commodity results, make fertilizer become very strategic production facilities (Directorate of Fertilizers and Pesticides, 2004). The distribution system of fertilizer in Indonesia has been regulated by the Minister of Trade. Arrangement of fertilizer distribution system with the hope that farmers can get fertilizer with six precise principles, namely: place, type, time, quantity, quality and price. The success and implementation of this system is one of them can be seen from the match between the distribution plan and the realization.

In cases of scarcity of fertilizers, especially the type of urea is a phenomenon that occurs repeatedly almost every year. This phenomenon is marked by soaring fertilizer prices at farm level far above the highest retail price (HET) applied by the government. Whereas the production of urea fertilizer is coming from 5 fertilizers factory State-Owned Enterprises (SOEs) is always above the domestic needs.

### Table 1. Production Capacity in Indonesia

<table>
<thead>
<tr>
<th>Company</th>
<th>Production Capacity per year (ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT Petrokimia Gresik</td>
<td>460.000 ton</td>
</tr>
<tr>
<td>PT Pupuk Kujang Cikampek</td>
<td>1.140.000 ton</td>
</tr>
<tr>
<td>PT Pupuk Kalimantan Timur</td>
<td>3.550.000 ton</td>
</tr>
<tr>
<td>PT Pupuk Iskandar Muda</td>
<td>1.140.000 ton</td>
</tr>
<tr>
<td>PT Pupuk Sriwidjaja Palembang</td>
<td>1.270.000 ton</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11.110.000 ton</strong></td>
</tr>
</tbody>
</table>

Source: Pupuk Indonesia’s Web

Thus, without reducing supply for domestic subsidized market, there is still a relatively small domestic non-subsidy for export market. But the facts on the ground indicate that there is often a rare phenomenon of supply and price hikes above the HET. In addition, there is also a distortion of urea fertilizer distribution determined.

The realization of fertilizer distribution both above and below the plan will lead to rare supply and price jumps either between seasons or between regions. For example, the realization of fertilizer distribution over the plan in certain months will cause supply shortages and price hikes in other months, given the predetermined amount of subsidized urea fertilizer. Similarly, the realization of fertilizer distribution in some districts is already on the plan causing rare supplies and price jumps in other districts. In addition to supply or quantity and price issues, six other precise principles that can be ensured are not met by a discrepancy between the plan and the realization of
the distribution is the place, type, and time. Only quality aspects are alleged to be fulfilled.

From the explanation above it can be concluded that there is still gap on the implementation of the distribution of subsidized fertilizer. Then the researcher interested to do research with title "Supply Chain Analysis on PSO (Public Service Obligation) Urea at PT Pupuk Kalimantan Timur". The researcher chose to use qualitative method with descriptive analysis to get as much information as possible and deeply.

LITERATURE REVIEW

Supply Chain Management

Indrajit (2002), defines supply chain management as a term for supplier and buyer chain management, covering all phases of processing from raw material buyers to distributing finished goods to final consumers. Pujawan Nyoman (2005), supply chain is a network of companies that jointly work to create and deliver a product into the hands of end users, such companies usually include suppliers, manufacturers, distributors, shops or retailers, as well as supporting companies Such as logistics services company.

In general supply chain management can be defined as a whole philosophy to manage the total flow of distribution networks from suppliers to end users/consumers (Cooper and Ellram, 1993). Another definition is put forward by (Simchi-Levi 2003), that the focus of supply chain management is not just on the flow of goods. Supply chain management is a set of approaches that are used to efficiently integrate between suppliers, companies, warehouses and store goods can be produced and distributed with the right amount to the right location and the right time with the goal of minimizing costs and satisfying the service to the consumer.

The basic purpose of supply chain management is to control inventory with material flow management. Inventory is the amount of material from suppliers used to meet customer demand or support the production process of goods and services. Companies can take an efficient supply chain management approach to coordinate material flows to minimize inventory and maximize company productivity. The company was more convinced because the material is an important component in the cost of the company can make a big profit through the reduction of material costs it becomes one reason why supply chain management is the key competitive weapon (Krawjewski and Ritzman, 2002).

Components in supply chain management are divided into three main streams:
1. The product component contains the flow of goods from suppliers to consumers.
2. Component information contains order delivery and review of delivery status.
3. Financial component consists of credit line, payment and payment schedule, delivery accuracy and identity of owner.

Upstream and Downstream Supply Chain

Indrajit and Djokopranoto (2002) stated that based on phenomenon that occurs in developed countries, it turns out the key to increasing the company performance located in the ability of company in working with a business partner, which in this case, they give company supply needs. The competitive advantage of company can be reach by many ways, where one of it is through supply chain management. Formerly, the relation between company and the suppliers (upstream) and the relation between company with customers (downstream) regarded as the relation between the different parties even it is opposite, so it is less close cooperation. It happens because many companies less realized that in their business relations often a lot of money wasted which is not provide added value at all, even hinder the ability to compete them. Now, it started to realize that competition which occurs actually not between the relation of upstream and downstream but it between one supply chain and another supply chain. Supply chain in substance is a network organization which concerns its ties to hulu (upstream) and hilir (downstream) and in the different process and activities that produces embodied values in goods and services in the hand of customers end (ultimate customer).

Efficiency

According to Tohir (1983), efficiency in the terms of economic has aims to reduced production costs in order to gain optimal benefits. An optimal benefit can be achieved by means of reduce the total cost of retain which production has achieved and by means of enlarge production without increase the production costs. According to Soekarwati (1990), the definition of efficiency is very relative, efficiency can be defined as the use of minimum input to get maximum production.

The basic of efficiency is the ratio/comparison output to input. The ways to improve the efficiency by using (Yasar A. Ozcan, 2008):
1. Increasing output
2. Decreasing input
3. Or if both output and input are increased, then the increasing level of output must higher than the increasing level of input or.
4. If both output and input are decreased, the decreasing level of output must lower than the decreasing level of input.

The other ways that can be used to reach higher efficiency besides four ways above is by applying a management technology that can reduce input and improve the ability in producing more output. Some concept about efficiency among others presented by Ramesh Bhat (2001) as follows:
1. Technical efficiency.
2. Allocative efficient.
3. Cost/total efficiency.

Research Method
According to the research questions and purposes of the research, the type of research used in descriptive research type using qualitative approach. The purpose of descriptive study is to provide a researcher with histories or to describe relevant aspects to concerning phenomena from a particular person, organization, orientation, industry or other entity (Sekaran, 2007).

Research Focus
This research studies on supply chain management in PT Pupuk Kalimantan Timur. Focus of this research includes:
1. Supply chain management process on PSO urea.
2. Efficiency of supply chain management in the company.

Research Location
Location of this research takes place in PT Pupuk Kalimantan Timur of which the official address is on James Simanjuntak street No. 1 Bontang, Kalimantan Timur

Data Collection Technique
In this research, data collection technique utilized by the researcher consists of several types defined as interview, documentation, observation. Observation guidelines, research records, documentation guidelines, and interview guidelines.

Data Analysis
Writing technique will be conducted using data reduction and verification method, using qualitative approach of the data obtained in the location of research (field data) which are specified in a complete and detailed report. Miles and Huberman (1994) stated that field report shall be reduced, summarized and selected for the fundamental specifics, focusing only on important matters, then its theme or pattern shall be sought. Data reduction runs continuously during the process of this research. In the period of data collection, a step defining data reduction is conducted subsequently by making summarize, coding, tracking for theme and creating clusters and writing a memo. Verification process is also conducted continuously during the period of research, i.e., since the beginning of the time the researcher was involved in research location and during the process of data collection. The researcher attempted to analyze and seek for meanings from the data he obtained.

RESULT AND DISCUSSION
Supply Chain In Pupuk Kaltim
To fulfill the Government's assignment to PT Pupuk Indonesia (Persero) in fulfilling the stock of subsidized urea fertilizers domestically, Pupuk Kaltim prepares sufficient subsidized urea fertilizer stock for the needs in each distribution area according to Government regulation which periodically stipulated by Decree of Minister of Agriculture Republic of Indonesia. Pupuk Kaltim produces and distributes subsidized fertilizer for the agricultural sector in accordance with the area of responsibility, ranging from Line I to Line IV based on the principle of 6 (Six) Rights, the Right Type, Right Quantity, Right Price, Right Place, Right Time and Right Quality. Pupuk Kaltim as the producer must guarantee the smooth distribution of subsidized fertilizer.

Figure 1. Supply Chain in Pupuk Kaltim
Source: Pupuk Kaltim's Web
In order to ensure the subsidized fertilizer requirement for farmers to fit six principles and also to facilitate the supervision of the distribution of subsidized fertilizers, it is necessary to have the right mechanism to do this distribution.

1. **Line I**

As we can see in Figure 4.3 that line I is located in a factory/producer which makes urea fertilizer, namely PT Pupuk Kalimantan Timur located in Bontang city, East Kalimantan. Urea is also called Nitrogen (N) fertilizer because it contains 46% Nitrogen. Urea is made from the reaction between Ammonia (NH3) and Carbon Dioxide (CO2) through a chemical process into a solid urea in the form of prill (1-3 mm size) or granule (2-4 mm in size). Urea prill is widely used for food and industrial crop segments, whereas granule urea is more suitable for plantation segment, although it can also be for food crops. Pupuk Kaltim produces its own raw materials (ammonia and carbon dioxide) so there is no need to buy from suppliers. While the raw material of this ammonia maker is natural gas taken from Muara Badak by flowing it through 60 km underground pipeline to Bontang. Today, Pupuk Kaltim has 5 urea fertilizer factories with production capacity of 3.43 million tons/year and 5 ammonia factories with production capacity of 2.74 million tons/year. The non-subsidized Urea is marketed and sold under the trademark Daun Buah, while the pink subsidized urea is marketed under the trademark Pupuk Indonesia. Every year the Government has determined the allocation of subsidies that Pupuk Kaltim has to fulfilled through the Decree of the Minister of Manpower and Transmigration.

Then in order to safeguard and avoid the misuse by irresponsible parties in the distribution of subsidized fertilizer, then there is changing in the color on the urea fertilizer that originally colored WHITE into PINK Urea fertilizer. The color change of urea fertilizer does not change the composition and its content, it is safe to use, environmentally friendly and does not poison the plants because the coloring material used is made of organic material which is not harmful to plants and dissolves in water.

The function of urea fertilizer coloring is, among others, to distinguish between subsidized fertilizer with fertilizer for commercial and to coat the fertilizer granule so that it is more potent. The coloring of Urea fertilizers starts from January 1, 2013 all of the distribution of Subsidized Urea are using Pink Urea.

2. **Line II**

After the factory produces urea fertilizer, the next step is to distribute the urea fertilizer to line II which is FPU (Fertilizer Packing Unit) in several provinces namely in Bontang, Surabaya, Banyuwangi, Bali, NTB and Makassar. Before distributing to line II, the things to note are transportation by sea. Moreover, there are several documents that must be completed by the transportation before the urea fertilizer loading process. The time required to finalize the document for about 2-3 hours, after which it can start the loading process of urea fertilizer to the vessel. The loading of urea fertilizer onto a vessel has different durations according to how many tons will be carried and also depends on the type of urea whether the bulk urea or bag urea to be carried by the vessel. Bulk urea and bag urea have different durations and amounts of cargo volume. For bulk urea, the transfer of urea fertilizer from warehouse to vessel in a day can reach 5000 tons/day. For bag urea, the transfer of urea fertilizer from warehouse to the cargo ship in one day can only reach 2000 tons/day. In addition, Pupuk Kaltim also see the weather conditions before making the transfer of urea fertilizer to the vessel. If the weather is good and bright then the loading process will run smoothly, but if it is raining then the urea fertilizer loading process is stopped until the rain stops. In Bontang, we cannot predict the weather for the next few days, because the weather in Bontang city itself is uncertain. Then in line II, it is just the process urea fertilizer packing that are in several provinces. The bagging process is fast enough because it has been using modern packing and tailoring machines. Some urea fertilizers that have been through the process of bagging will be transferred to several warehouses in line III which aims to reduce the build-up of urea fertilizer in FPU and facilitate the distributors to take urea fertilizer according to their respective distribution areas.

3. **Line III**

In carrying out the government's assignment of subsidized urea fertilizer distribution, Pupuk Kaltim has the standards and requirements that the distributors have to fulfill. Distributors may take the form of individual business or business entity either in the form of a legal entity or non-legal entity engaged in general trading business. Then have experience as a fertilizer trader at least 2 growing seasons and have
shown good distribution performance in accordance with the producer's assessment. They have to have an office and actively running a trading business in their place of domicile. They have to fulfil the general requirements for trading activities such as Trade Business License (SIUP), Company Registration Certificate (TDP), Business Place License (SITU) and Taxpayer Identification Number (NPWP). Distributors are required to have facilities of warehouses and transportation that can ensure the smooth distribution of subsidized fertilizer in their responsibility area. They need to have a distribution network in the area of responsibility set by the producer. Then the distributor must appoint at least 2 retailers in each sub district or village which is the area of agricultural production centres in their area of responsibility. Distributors only serve the sale of subsidized urea fertilizer which is a group of retailers they have appointed. They have to have sufficient capital and agreed by the producers and have recommendation letter as a distributor of fertilizer from the local Regency/City Department Service Office. From the line II warehouse, the urea fertilizer will be distributed to the line III warehouse distributor. Actually this line III warehouse is a fertilizer buffer owned by Pupuk Kaltim which is rented from warehouse owner and land, so it is not distributor's warehouse. Distributor is only entrusted the urea fertilizer purchased from Pupuk Kaltim and then stored it in Pupuk Kaltim line III warehouse. The collection of subsidized fertilizer from line II warehouse to line III warehouse must be in accordance with the sales order from distributors so that it will be suitable with the needs of retailers and farmers. Pupuk Kaltim instructs the distributors to always maintain the stock according to the provisions of 2 weeks requirement. The distributor's truck is the only transportation used to distribute urea fertilizer from line II warehouse to line III warehouse, because the distance from line II warehouse and line III usually not too far. For example line III warehouse distributor located in Jember East Java. In Jember, there are 3 line III warehouse distributors and 9 urea fertilizer distributors. One of the line III warehouses in Jember takes subsidized urea fertilizer from line II warehouse located in Banyuwangi because the distance is not that far and does not take so much time.

In Jember, the subsidized urea fertilizer has always meet the target and corresponding to the retailer need and farmer, therefore, scarcity case of subsidized urea fertilizer has never happened in Jember.

4. Line IV

Line IV enters the final process of the supply chain which are retailers and farmers. One retailer is allowed to obtain subsidized urea fertilizer only from one distributor which previosly selected by the distributor and Pupuk Kaltim, thus retailers cannot drawing stocks from other distributor. In a month, retailer cannot predict urea fertilizer needed by farmers since their need lays relatively according to the area, commodity and the fertilization. Therefore, the need for urea fertilizer fluctuates. Urea fertilizer needs will increase during the planting season. And usually in month 7-8 the need for urea will decrease.

After that, every retailer is responsible for different area of distributions. As shown by 88 Shop which located in Jalan Raya Singosari No 88 B Singosari Distrcit, Malang Regency, East Java, this retailer admits that they are responsible for four villages including a total of 13 farmers association. Retailer will supply the buyers from those four villages, but only those who incorporated to the farmers association. Farmers who are not incorporated with any farmers association will not be supplied or able to buy fertilizer from the retailers since the stocks of subsidized urea fertilizer are limited and the subsidized urea fertilizer are supplied puposely for the farmers association.

According to the Regulation of The Minister of Agriculture that regulate about The Highest Retail Price (HET) of subsidized urea fertilizer, it is expected there are no retailers setting their own price. The price regulated by The Minister of Agriculture is the affordable price for farmers.

At this time, there are still many farmers who do not know about the mechanism to get subsidized urea fertilizer. From the result of the interview with retailer, there are still many farmers who want to buy subsidized urea fertilizer but they are not joined in farmers association. Although they are able to pay the price of subsidized urea fertilizer but they are still cannot buy it. All subsidized urea fertilizer have certain calculation from farmers association from many villages so that will be adjusted with their needs.

Farmers also claimed that RDKK system and farmers association are very helpful in resolve urea fertilizer problem. They easily obtain the urea fertilizer and also suitable with their needs. Until
today there are no farmer experiencing trouble to get the fertilizer.

**Supply Chain Efficiency in Pupuk Kaltim**

In order to achieve success by the company, they need good performance from all of the company's component. If there is one component not working properly, such condition will obstruct the company success. In performing, company needs efficiency so that the company can use their resources as good as possible and obtain high profit. I think Pupuk Kaltim has done good efficiency in subsidized/PSO urea product supply chain. The efficiency shown by the good performance results every year by the company. Theoretically Pupuk Kaltim has done technical efficiency. This technical efficiency is related to the use of labor, capital, technology and machine as the input that will produce optimal output. In running the supply chain and distribution of subsidized urea fertilizer Pupuk Kaltim needs skilled and professional labor. The labor and employee in Pupuk Kaltim in the last 5 years have decreased dramatically. That is because there are many employees enter retirement. Yet in Pupuk Kaltim it self are not always hiring annually, it is based on the job field or the department which need more labor. If the labors in every job field or department are still fulfilled so they will not be hiring. That is for minimize the input cost as much as possible.

Human Resources (SDM) is the one of the most precious asset of the company. Human Resources has a strategic role in achieving Pupuk Kaltim Vision to be World class Company in Fertilizer, chemical, and agribusiness industry that continually developing. Excellent, professional, and competent human resources is the main element in supporting company's operational that use advanced technology. The ability of the technology is very influencing in production process. Therefore, the development of human resources based on competence and developing of good employment relation is a strategic focus of the company. Human Resources competence enhancement is useful to anticipate the company policy in order to efficient the amount of the employees gradually, noted in 2016 Pupuk Kaltim was supported by 2.147 permanent employees that decreased 9,6% from 2.375 permanent employees in the previous year. This derivation is caused by many employees enter retirement and human resources optimization in company. Pupuk Kaltim holds training for all the employees embrace in-house training, off-site training, certification and learning task. In 2016, the number of training days is 40.478 days. In-house training done in 2016 embrace leadership training, Management Development Program (MDP) and prospective new employee training. Off-site training program in 2016 embrace occupation competence enhancement, certified training, quality training, Occupational Health and Safety, full-time training, and some training abroad.

Pupuk Kaltim planned the amount of labors with considering the strategy and policy of company developing, the amount of retired employee, and suggestions from the employee of each Work Unit. The planning also considering about efficiency program and business process integration through information technology done by the company. The implementation of the recruitment, since 2014 a part of recruitment for bachelor level done integrated with PT Pupuk Indonesia altogether with another holding member by road show in superior universities targeted their best graduate. On the Job Training (OJT) program of new employee also integrated with holding member PT Pupuk Indonesia (Persero) by Management Trainee (MT) program. Every prospective worker in first OJT stage for 3 months will be rotated to another holding member in order to get the experience, knowledge and new culture that have not exist in trainee placement company.

In the production of urea fertilizer needs some materials. The main material of the urea fertilizer are ammonia (NH3) and dioxide carbon (CO2). Pupuk Kaltim do not need the materials from supplier, because they can make their own ammonia and dioxide carbon. Ammonia produced by Pupuk Kaltim marketed in liquid in -33C with the minimum pureness 99,5% and impurity as water 0,5% maximum. Ammonia was made by natural gas material that reacted with air and water steam processed in high temperature and high pressure gradually through some reactors that contain catalyst. Natural gas material was directly taken from Badak Estuary by drain it with 60km pipes from Bontang. With the convenience of obtaining the main material, natural gas is a benefit for Pupuk Kaltim. The cost for purchasing materials not as much as another fertilizer company in Indonesia. This is the form of the Pupuk Kaltim efficiency in the production of urea fertilizer. Furthermore, Pupuk Kaltim is supported by 5 production units of urea fertilizer. Urea fertilizer type prill was produced in Factory 2 and Factory 3, while granule urea produced in Factory 1A,
Factory 4, and Factory 5. Factory 5 is the newest production unit built in 2011 and inaugurated by Mr. Joko Widodo as President in November 19th 2015. Factory 5 is the most energy saving and material saving compared to another production units. Besides it is energy and material saving, factory 5 has the biggest production capacity in Indonesia as well South-East Asia that is approximately 1,15 million tons/year. From 5 production units, every year Pupuk Kaltim is able to produce urea fertilizer approximately 3,43 million tons/year.

The large production capacity of urea fertilizer every year helps the government in fulfilling the needs of urea fertilizer by farmers. Furthermore, with the production capacity it is expected to avoid the scarcity of urea fertilizer.

In 2016 Pupuk Kaltim assigned by PT Pupuk Indonesia (Persero) according to The Regulation of The Minister of Agriculture 20/KPTS/SR.320/B/10/2016 as much 1,46 million ton subsidized urea. Corresponding to the target, the company success to distribute subsidized urea as much 1,42 tons or 97% from the Ministry of Agricultural allocation. Not achieved the target 100% Decree of Ministry of Agricultural because the season transition affected the subsidized fertilizer purchasing behavior by farmers mainly happen in some regions in Indonesia. The extreme weather caused delay of planting season so that the absorption of the fertilizer in food sector are under the target.

Efficiency in economics is having purpose to minimize production cost in order to obtain optimal profit. From the research result conducted by the researcher, it shows that Pupuk Kaltim has done the efficiency properly. It is shown by the output that is very optimal so that in every month and year Pupuk Kaltim always try to meet the subsidized target set by the government. From table 5.0 the distribution of subsidized urea in July 2017 as much 88,710 tons subsidized urea from the target 62,621 tons. There are increasing or subsidized urea fertilizer absorption as much 141% form the target. If Pupuk Kaltim do not meet the target set by Decree of Minister of Agricultural so there are some reasons happen such as season transition until the decreasing of farmers purchasing and el nino. Furthermore, in a supply chain management subsidized urea fertilizer, Pupuk Kaltim have also manage it well. Then if we interpret supply chain according to Puwan Nyoman (2005) is a network of companies that altogether work for creating and distributing a product to the user's hand. Some companies include are factory, supplier, distributor, retail, and supporting service company such as logistic. This network and corporation have to run properly so that the information exchange will not miss. Sharing the information is also one of the important things in supply chain management. As is the sharing of information between government, distributor, retail, and farmers will be very helpful to Pupuk Kaltim in fulfilling the need of subsidized urea fertilizer by the farmers in east Indonesia. Therefore, supply chain management is not only company internal oriented but also external that is good relationship with partner companies. That is supported by another opinion (Simchi-Levi, 2003) that supply chain management is not only focused on goods flow but more to series of approach that used for integrating supplier, company, warehouse, and store so that the goods can be produced and distributed with the right time and amount in order to minimize the cost and satisfy the customers. After that, with good integration and corporation between government, distributor, retailer, and farmer obtain a good result that there are no scarcity of subsidized urea fertilizer. The scarcity case of subsidized urea fertilizer that often issued by farmers are actually do not exist because Pupuk Kaltim itself always try to fulfill the distribution target mentioned in Decree of Ministry of Agricultural. Furthermore, from the interview result with the retailer also said that the scarcity of subsidized urea fertilizer are no longer exist, and subsidized fertilizer always come in the right amount and time. The only problem is just there are still farmers who are not yet joined to farmers association so that they cannot buy subsidized urea fertilizer from the retailer. Accordingly, there are many issues from the farmers that there are scarcity of subsidized urea fertilizer. The reality is now there are many farmers who are still lay and lack of information about RDKK and farmers association.

CONCLUSION AND SUGGESTION

Conclusion

1. Good supply chain management is one of the key of company success in business world. There are many things that have to be considered in supply chain management begin with materials, production process, distribution channel, until the goods arrive to the consumer. Pupuk Kaltim is one of the companies that produce most urea fertilizer in South East Asia that able to produce 3,43 million tons urea...
fertilizer every year. In fulfilling the needs of subsidized urea fertilizer Pupuk Kaltim have a high commitment, so that there are almost no scarcity case of subsidized urea fertilizer. That was also supported by good distribution channel from line I until IV. Yet, it is unfortunate there are still many farmers do not know about RDKK and farmer association, so that there are still many farmers need subsidized urea fertilizer.

2. Pupuk Kaltim has done good efficiency to supply chain management so that we can see from the output result are optimal. The researcher believes Pupuk Kaltim should be more efficient than today. It will be more efficient if the government by Decree of Ministry of Agricultural and Pupuk Kaltim be more accurate in doing the estimation need of subsidized urea fertilizer. Because in 2017 the amount of Pupuk Kaltim distribution is over than the regulation/target. That will make Pupuk Kaltim incur loss in production and financial.

Suggestions
1. Pupuk Kaltim and Government should re-counsel to some villages to the farmers who are still not joined in farmer association. So that it is expected there will be more farmers joined in farmer association and distributing subsidized urea fertilizer correctly.

2. Pupuk Kaltim and Government need to review about the amount of subsidized urea fertilizer regulation. It is need accurate estimation so that the amount of demand in Decree of Ministry of Agricultural is not too different than the demands in field. If the gap is too much so that Pupuk Kaltim will incur loss continuously.

3. For further researcher, it is suggested to do more in-depth research on supply chain management on subsidized urea fertilizer. Because at one time there will always be an update or change of a technology that makes the distributors, retailers and farmers will change the supply chain management system that has been run at this time.

REFERENCES