

Analysis of Logistic Inventory Control for Disaster at the Office of Social Services in Pasangkayu Regency

Nasrullah Akkas^(1*), I Made Budi Arnawa⁽²⁾, Farid⁽³⁾, Salmiati⁽⁴⁾

^{1,2,3,4} Faculty of Economic, Universitas Muhammadiyah Palu

*Corresponding Author, Email: arul_8556@yahoo.co.id

ABSTRACT

The process of providing logistics at the Pasangkayu Regency Social Service is by the Regulation of the Minister of Social Affairs of the Republic of Indonesia Number: 82 / HUK / 2005, concerning the Organization and Work Procedure of the Ministry of Social Affairs of the Republic of Indonesia, starting from a recording or identifying and assessing needs including logistics and equipment, from which assistance is received, what kind of help, how much and how to use it. The research objective was to identify and analyze the logistics supply control for disasters at the Pasangkayu Regency Social Service Office. The research method uses the Economical Order Quantity method in minimizing the cost of logistics supplies at the Pasangkayu Regency Social Service. The reporting system carried out by warehouse officers at the Pasangkayu Social Service provides information about logistical data/goods in the warehouse and is made periodically and continuously from releasing and distributing logistics/goods. In carrying out the Economic Order Quantity (EOQ) method, which aims to get the optimum number of orders, of course, it must be supported by an information system that can find out the amount of use of each logistics available at the Pasangkayu Regency Social Service Warehouse.

Keywords - Control, inventory, logistics, disaster

INTRODUCTION

Law of the Republic of Indonesia Number 24 of 2007 concerning disaster management, particularly in Article 6 and Article 8 has mandated that the government and local governments are responsible for disaster management, which among other things, provides protection to the community from the impact of disasters, and implements recovery of conditions of the effects of disasters, including logistical assistance during an emergency. The result of disasters is numerous, including economic, physical, social, and environmental losses. Post-disaster recovery or recovery activities require support from all parties. Extensive disaster management requires a large budget, and sometimes government supplies can be insufficient. Planning for dealing with disasters requires strong regional policies in dealing with natural disasters. Apart from regulation, consolidation of human resources and information technology tools is also needed.

The Pasangkayu Regency Government hopes that the community will actively participate in disaster management; this can be done in three stages, starting from pre-disaster, during a disaster, and post-disaster. Disaster management can utilize human resources in the area, especially in Pasangkayu Regency. At the time of pre-disaster, people in Pasangkayu Regency will anticipate by giving warnings about the disasters that will occur.

Then in the event of a disaster, the community will help each other, and other organizations distribute assistance in clothing, food, and shelter.

Logistical assistance distributed during disaster management must be on time, on target, in quality, in quantity, and accordance with the needs desired by the affected communities. In assisting, the Social Service of Pasangkayu Regency assisted by the requests and conditions of availability of logistics stocks requested by disaster victims.

METHODOLOGY

The data analysis process is carried out continuously, starting with reviewing all available data from various sources, namely from interviews, observations that have been written in field notes, documents, and concluding. In conducting data analysis, the researcher refers to several stages described, which consist of several locations, including 1) Collecting information through interviews with informants who are compatible with research then direct observation in the field to support the research carried out to obtain the expected data source. 2) Data reduction, namely the selection process, focusing attention on simplification, the transformation of rough data that arises from records in the field while researching the purpose of conducting data transcripts to select which information is deemed appropriate and not by the problem which is the center of research in the field. 3) Presentation of data, namely the activity of a collection of information in the form of narrative, network graphs, tables, and charts, which aim to sharpen the research understanding of the word selected and then presented in a table or explanation description. 4) The final stage is the conclusion drawing/verification, which seeks the meaning of explanatory patterns, possible configurations, causal pathways, and propositions. Conclusion drawing is done carefully by verifying in the form of reviewing records in the field so that the validity of the data.

EOQ model, Economic Order Quantity (EOQ), is one of the classic models introduced by FW Harris in 1914 but is most widely known in inventory control techniques. EOQ has been widely used so far because it is easy to use, although, in its application, you must pay attention to the assumptions used

RESULT

Controlling the right logistics supplies, mostly disaster relief in Pasangkayu Regency, is not easy because the amount of inventory is too large, resulting in large idle funds (embedded in stock), increased storage costs, and a greater risk of damage to goods.

The balance between demand and supply means that the collection is complete, but what needs to be seen from the number of items. Judging from the number of units, it is sufficient but not excessive.

Economic Order Quantity (EOQ) is several inventory items that can be ordered during a period to minimize the cost of the inventory (Sabarguna, 2004) (10). Reorder Point (ROP) is a method for deciding when to reorder so that a balance between supply and demand is created. Simultaneously, buffer stock is an additional supply that is held to protect and protect against possible material shortages (John and Harding, 2001). (9).

Based on the results of interviews with the head of the warehouse at the Pasangkayu Regency Social Service, it was stated that so far, the order was made if the stock was running low, there was no specific calculation for reordering and how much to order.

DISCUSSION

The process of relief goods at the Pasangkayu Regency Social Service was held by the West Sulawesi Provincial Social Service office; the assistance was carried out to meet the social needs in Pasangkayu Regency, especially victims of natural disasters. The logistics flow that is carried out by the Postakayu Regency Social Service, all supplies and equipment are stored in a warehouse to maintain safety and integrity.

The Pasangkayu Regency Social Service follows up the logistics management set by the Ministry of Social Affairs by managing the logistics management for disaster management, which consists of eight stages of logistics guidelines carried out as a whole into one integrated system. These stages consist of:

1. Identification and assessment of needs
2. Planning
3. Procurement / Dropping center
4. Process
5. Planning and procurement procedures
6. Warehousing
7. Distribution system
8. Monitoring and reporting
9. Coordination
10. Deletion
11. Organizational status

There is no specific calculation regarding the number of orders in ordering logistics at the Pasangkayu Regency Social Service warehouse. The number of orders depends on the needs of disaster victims. This can lead to waste as there is a risk of increasing ordering costs if orders are placed in small quantities or increasing storage costs if there are too many orders. Therefore, it is necessary to have an accurate calculation to determine the optimum order quantity, namely the Economic Order Quantity (EOQ) method.

In the management of special logistical assistance at the Pangsangkayu Social Service it focuses on warehouse managers so that the distribution of relief items can run well. The power of warehousing assistance at the Pasangkayu Social Service is carried out in an orderly and adequately administratively; every month, there is control of goods in the warehouse with a supervisory and control mechanism warehousing management. The warehousing administration system, especially the existence of logistics/goods, can be checked at any time, whether related to the name, type, specification, quantity and mutation, proof of the amount of inventory, and logistics in the warehouse.

At the Pasangkayu Social Service reports, the warehouse clerk completed the warehousing administration system by providing goods receipt books, goods release books, and goods delivery documents, and delivery orders (DO).

The reporting system carried out by warehouse officers at the Pasangkayu Social Service provides information about logistical data/goods in the warehouse and is made periodically and continuously from releasing and distributing logistics/goods. As for the presentation of the report:

1. Monthly Logistics / Goods Condition Report To find out the condition of Logistics / Goods at the end of the month, which functions as a control tool for the Ministry of Social Affairs, especially in preparing needs plans, this report is made at the end of each month based on daily and weekly reports.
2. Annual Logistics / Goods Condition Report To determine the condition of Logistics / Goods at the end of each year as of December 31st, a Stock Opname is carried out to find out the inventory stock based on revenue and expenditure transactions; this report is made at the end of the year which is known as an annual report.
3. Stock Opname Report The information is based on the results of the logistics/goods inspection at the end of the year by an integrated team; the results of the Stock Opname report are used as material to calculate the value of the logistics/goods initial balance at the beginning of the current year.
4. Damaged Goods Condition Report To find out the condition of damaged and expired goods in the warehouse, the reporting is made based on the warehouse clerk's assessment results. It is equipped with a goods inspection program.

According to Heizer and Render (2010). (8), along with the increase in the number of goods ordered, the number of orders per year will decrease, but the storage cost will increase because the amount of inventory that must be taken care of is more. For that, the number of orders must be able to minimize ordering costs and storage costs. So, according to Seto (2004), to determine the number of economic orders, efforts must be made to reduce ordering costs and storage costs.

In carrying out the Economic Order Quantity (EOQ) method, which aims to get the optimum number of orders, of course, it must be supported by an information system that can find out the amount of use of each logistics available at the Pasangkayu Regency Social Service Warehouse. The information system in the Pasangkayu Regency Social Service Warehouse has not been running optimally, so it cannot provide information about the total logistics needs. This is an obstacle felt by the Pasangkayu Regency Social Service warehouse in determining the number of orders based only on estimates.

The system for releasing goods at the Regency / City Social Service is as follows:

1. The Head of the Pasangkayu Regency Social Service instructs the Head of related fields and warehouse managers to analyze the need for disaster victims' protection items based on disaster victim data.
2. Warehouse managers/agencies of the Pasangkayu Regency Social Service prepare to release goods for disasters.
3. The Head of the Pasangkayu Regency Social Service instructs officers to take goods from the warehouse to be handed over to the disaster post (disaster victims).
4. The manager of the Pasangkayu Regency Social Service warehouse hands over the goods to the office accompanied by proof of delivery of the goods.
5. The warehouse manager of the Social Service of Pasangkayu Regency records the mutation of goods in the inventory book and goods card.

CONCLUSIONS

Based on the above discussion, this study's conclusion is the control/supervision of inventory carried out in the warehouse of the Pasangkayu Regency Social Service, namely through stocktaking and stock cards. Logistic inventory control has not used unique control methods, such as Economic Order Quantity (EOQ), to determine the optimum order quantity.

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