

# Analysis of Raw Material Inventory in Peuyeum Business Mr. Marsan in Batujaya Sub-District, Karawang

Linawati<sup>1</sup>, Dedi Mulyadi<sup>2</sup>, Santi Pertiwi Hari Sandi<sup>3</sup>

<sup>1,2,3</sup>Universitas Buana Perjuangan Karawang

## Article Info

### Article history:

Received May, 2024

Revised May, 2024

Accepted June, 2024

### Keywords:

Peuyeum

Raw Material Inventory

Quality

Supplier

## ABSTRACT

This study aims to determine how the inventory of peuyeum raw materials and how to anticipate the quality mismatch of peuyeum raw materials in supporting the continuity of Mr. Marsan's peuyeum business. This research method using descriptive qualitative. Data collection through interviews with Mr. Marsan, direct observation, and document analysis related to raw material inventory. The result of this study is that sufficient supply of raw materials according to needs can facilitate the production process and can produce quality products. There are four raw material suppliers who work with Mr. Marsan, namely Bogor, Subang, Sukabumi, and Lampung. The prices offered from each supplier are different. Bogor with a price of Rp2,200/kg, Sukabumi Rp2,300/kg, Subang Rp2,150/kg, and Lampung Rp2,500/kg. Suppliers have their own advantages and disadvantages. Of these advantages and disadvantages, Bogor and Subang are the main suppliers. Bogor and Subang were chosen to be the main suppliers because they offer lower prices, the quality of cassava that suits the needs, in addition to the close delivery distance. With these advantages, cassava from Bogor and Subang is often the first choice compared to Sukabumi and Lampung. In preventing or reducing the risk of raw material quality mismatches, there are several efforts made, one of which is by sorting or checking each raw material sent before production.

This is an open access article under the [CC BY-SA](#) license.



## Corresponding Author:

Name: Santi Pertiwi Hari Sandi

Institution: Universitas Buana Perjuangan Karawang

e-mail: [santi.pertiwi@ubpkarawang.ac.id](mailto:santi.pertiwi@ubpkarawang.ac.id)

## 1. INTRODUCTION

Indonesia is an agricultural country that is rich in various food sources both vegetable foods such as cereals, nuts, tubers, fruits, vegetables, and animal ingredients such as meat, milk, eggs, and seafood/fisheries. Indonesian people are able to create and develop these foods into various processed foods that are characteristic of a region. [1]

Traditional food and culinary are cultural assets of high value so they must be preserved [1]. One product that has high cultural value and wide popularity is peuyeum, a fermented food made from cassava. Peuyeum has a unique taste that is appetizing and has become a favorite snack of many people in various regions in Indonesia. As a popular traditional food, peuyeum has an important role in maintaining cultural heritage and supporting the livelihoods of a

number of people as well as having a stable demand in the market.

Information obtained from the Karawang Industry and Trade Office (Disperindag), namely Mr. Adang in the field of Industry said that currently there are 650 Small and Medium Industries (IKM) processed food and beverages in Karawang under the guidance of Disperindag. Of the 650 SMIs, there are several SMIs that focus on selling processed cassava tape or peuyeum

located on Jalan Tuparev and Kertabumi Karawang. Source: Disperindag, 2023

One of the productions known for the quality of peuyeum in Karawang is "Mr. Marsan's Peuyeum Production". Mr. Marsan has long contributed to maintaining the tradition of making delicious peuyeum. Production of these peuyeum has grown rapidly in recent years, with growing demand from local consumers and even from outside the region. Here is Mr. Marsan's peuyeum demand data for 2022.

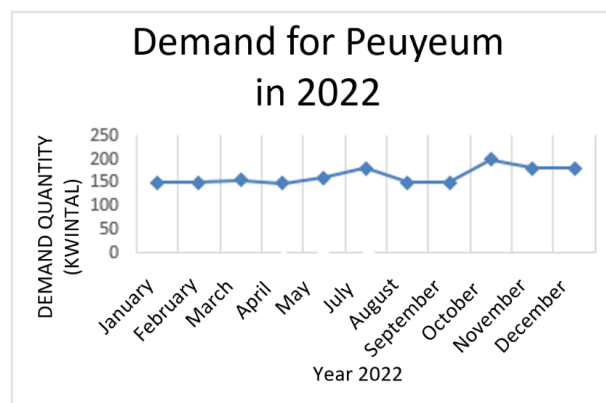


Figure 1. Peuyeum Demand Graph in 2022

Source: UMKM Peuyeum, 2023

Given the increasing demand growth, Mr. Marsan's peuyeum business is faced with various challenges, one of which is related to the supply of raw materials. To face these challenges, inventory analysis is needed. Inventory analysis is an evaluation and appraisal process that is carried out to understand how the stock or items available in a company or organization are managed and impact business operations. Good inventory analysis is key in ensuring smooth production, cost savings, and providing consumer needs. [2]

The factors that made the author choose the location of this study include because Mr. Marsan's peuyeum business is one of the peuyeum productions in Karawang Regency. Based on data obtained from Disperindag that some areas in Karawang only sell without producing.

According to previous research [3] Regarding the analysis of elements of raw material inventory control and product quality on cost efficiency. The results showed

that by controlling the inventory of raw materials, it can periodically measure and compare the results of cost efficiency.

According to [4] regarding the analysis of raw material inventory on CV. Holopis Daya Bersama Surabaya. The results showed that in obtaining raw materials to be used, calculations and planning were carried out in advance with the regular amount of inventory, the production process could run according to planned planning.

Meanwhile, according to research [5] regarding the analysis of raw material inventory on Boulevard D'Coffee Aceh Manado. The results showed that the raw material inventory procedures owned by Boulevard D'Coffee Aceh Manado were still somewhat lacking because Boulevard D'Coffee Aceh Manado did not record / identify the costs incurred in the provision of raw materials.

With this research, the author is interested in knowing more about how the supply of raw materials in Mr. Marsan's

peuyeum business and how Mr. Marsan anticipates the mismatch in the quality of raw materials in achieving business success and contributing to local economic sustainability and cultural heritage preservation. Therefore, the author made the title "Analysis of Raw Material Inventory at Mr. Marsan's Peuyeum Business in Batujaya Karawang District".

## 2. LITERATURE REVIEW

### 2.1 Definition of Financial Management

According to [6] Financial management is the management of financial functions, namely how to get funds (*rising of funds*) and how to use funds (*allocation of funds*). According to [7] Financial management is a field of study that focuses on managing the finances of a company, including in terms of finding sources of funds, allocation of funds, and distribution of company profits. While according to [8] Financial management is a process that involves regulating financial activities or operations within an organization. It includes planning, analyzing, and controlling financial activities that are generally carried out by financial managers.

### 2.2 Definition of Inventory

According to [9] Inventory is a number of materials/goods provided by the company, both in the form of finished goods, raw materials, and goods in process provided to maintain the smooth operation of the company to meet consumer demand at any time. According to [10] Inventory as a current asset is the amount of goods that have not been sold and have "economic value", which in turn will be sold to customers (*customer*) to make a profit or profit. While according to [11] Inventory is an item that a company owns for resale or uses to make products to be sold. Inventory is one of the assets that can be immediately withdrawn to increase cash when the inventory is sold, so it is included in current assets.

### 2.3 Raw Material Inventory

Material inventory is an activity that establishes the composition of the inventory

of various parts, raw materials, and finished products, which aims to ensure smooth production and sales and meet the company's spending needs in an effective and efficient way [12]. There are four main indicators in raw material inventory management:

1. Economical booking quantity
2. Purchase Cost
3. Booking fee
4. Storage costs

### 2.4 Costs Arising from Raw Material Inventory

Inventory costs are costs incurred due to inventory. According to [13] Costs arising from such inventory include:

1. Storage Cost

Costs associated with the storage of goods within a certain period of time.

2. Booking Fee
3. Costs incurred during the booking process, such as booking administration fees, forms, and so on associated with the booking process.
4. Installation Cost

Costs incurred to prepare machines or production processes in order to produce goods or components needed by the company itself, such as the cost of maintaining production equipment.

#### FRAME OF MIND

Mr. Marsan's peuyeum business, Batujaya Karawang District, is a small and medium industry that produces peuyeum. To support the growing level of demand, it is necessary to pay attention to the supply of raw materials. The raw materials delivered are materials that can be produced immediately. In order for this business to remain attractive to local and interlocal customers, the selection of raw materials must be done to maintain the quality of production. For more details, Mr. Marsan's peuyeum business, Batujaya Karawang District, can illustrate the frame of mind chart in figure 2 below:

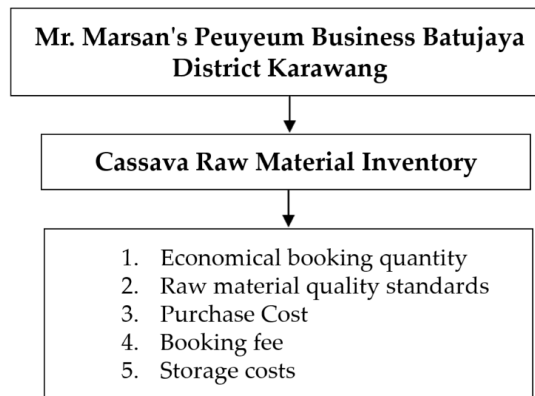


Figure 2. Research Paradigm  
Source: Author's Preparations, 2023

### 3. METHODS

The research method used in this study is qualitative descriptive. This research was conducted in Telukambulu, Batujaya District, Karawang in Mr. Marsan's peuyeum business. The main respondent in this study was the owner of the peuyeum business, Mr. Marsan. This research will be conducted in August-November 2023. Data collection techniques in this study are by making observations, interviews, and literature studies related to research variables.

### 4. RESULTS AND DISCUSSION

Mr. Marsan's peuyeum business which is located in Telukambulu, Batujaya District, Karawang, West Java was established in 1985. One of the famous peuyeum productions in Karawang is Mr. Marsan's peuyeum production. Peuyeum production has grown rapidly in recent years, with increasing demand from local consumers, namely several sub-districts in Karawang, such as Batujaya, Tanjungpura, Tirtajaya and even from outside the region, such as Cibitung, Bogor, Cikarang, Subang, and Kedungwaringin and Bandung.

#### 4.1 Raw Material Inventory

For the sustainability of production every day, raw materials are needed. In obtaining raw materials to be used, planning is needed in advance. This is so that the number of raw materials is in accordance with the amount of demand, so that there will be no excess of raw materials and also there will be no additional costs that will arise. Mr. Marsan's Peuyeum business requires 5-6 quintals of cassava raw materials every day. However, if the amount of demand is increasing in a day, it requires up to 8 quintals of cassava. The inventory of raw materials in business is very important because if the number of raw materials needed and the available raw materials are not appropriate, it will affect production which will affect consumers who order them.

In the business run by Mr. Marsan gets raw materials from several suppliers from various regions, including Bogor, Sukabumi, Subang, and Lampung. Of course, the prices offered by each supplier are different. The following is a table of raw material prices obtained by Mr. Marsan in peuyeum production, below.

Table 1 Raw Material Prices for Each Supplier

No.	Supplier	Price (Kg)
1.	Bogor	IDR 2,200
2.	Sukabumi	IDR 2,300
3.	Subang	IDR 2,150
4.	Lampung	IDR 2,500

Source: UMKM Peuyeum, 2023

From table 1 above, here are the advantages and disadvantages of each supplier. The

advantages and disadvantages of suppliers can be seen in table 2 below.

**Table 2 Advantages and Disadvantages of Each Supplier**

Supplier	Advantages and Disadvantages	
	Advantage	Lack
Bogor	<ul style="list-style-type: none"> <li>a. Close delivery distance</li> <li>b. Cheap logistics costs.</li> <li>c. Climatic conditions suitable for plant growth include cassava, so the cassava produced is of good quality.</li> <li>d. The workforce is large so that in faith it can be done quickly, there are no delays.</li> </ul>	Lack of skilled labor in the management of cassava cultivation so that it can lead to reduced productivity and not can maintain product quality.
Sukabumia	<ul style="list-style-type: none"> <li>a. Large tracts of farmland can support cassava production on a large scale.</li> <li>b. The cooperation between local farmers and suppliers is very good so as to improve the quality of good cassava yields.</li> </ul>	<ul style="list-style-type: none"> <li>a. Long delivery distance.</li> <li>b. The raw materials sent are sometimes not in accordance with what has been ordered and must be returned, thus hampering the production process because it takes time to reorder raw materials.</li> </ul>
Subang	<ul style="list-style-type: none"> <li>a. The delivery distance is close.</li> <li>b. There are no logistics costs.</li> <li>c. With a strong agricultural tradition, this can support local knowledge in cassava cultivation and management.</li> </ul>	Obstacles in delivery, namely the difficulty of vehicles and poor road access.
Lampung	Lampung is known as one of the largest cassava producers in Indonesia which has extensive agricultural land. Thus, any request in any quantity will be fulfilled.	<ul style="list-style-type: none"> <li>a. Remote calculation distance.</li> <li>b. Logistics costs are more expensive.</li> <li>c. Long delivery time with an estimated 4 – 6 days.</li> </ul>

Source: UMKM Peuyeum, 2023

By understanding the advantages and disadvantages of each supplier, Mr. Marsan's peuyeum business can establish relationships with suppliers effectively and make better decisions in choosing suppliers according to needs.

#### **4.2 Anticipating Raw Material Nonconformities**

The raw materials shipped from the four suppliers are the same type of cassava. The raw materials used in Mr. Marsan's peuyeum production must be of good quality. Here are the qualities of cassava used in Mr. Marsan's peuyeum production which can be seen in table 3 below.

Table 3 Cassava Quality


Cassava Quality	
	<p>Cassava used is a type of butter cassava. Cassava butter has several advantages, including:</p> <ol style="list-style-type: none"> <li><b>a. Chewy and legit texture</b> Cassava butter has a chewy and legit texture, suitable for a variety of culinary ingredients, either as a main ingredient or in desserts.</li> <li><b>b. Has an interesting yellow color</b> Butter cassava has an attractive yellow color, giving aesthetic value to the resulting peuyeum.</li> <li><b>c. High content of nutrients</b> Cassava butter is rich in carbohydrates and fiber. Cassava butter has an additional content of vitamin A.</li> <li><b>d. Has a fairly high starch content</b> Cassava butter has a fairly high starch content, this starch can be used in the processing of peuyeum to obtain the desired texture.</li> <li><b>e. Easy processing</b> In making peuyeum, cassava is needed that is not too ripe and hard, but also not too young. Overripe cassava can complicate the fermentation process. Cassava butter, which has a low water content, is helpful in the processing process.</li> </ol>

Figure 3. Cassava Butter

Source: UMKM Peuyeum, 2023

As a result of an interview with Mr. Marsan as a peuyeum business owner, he explained that ordering raw materials from suppliers is often not in accordance with the quality standards that have been set, therefore he has several ways to anticipate it, which are as follows:

1. Establish clear specifications for the type of raw materials to be used.
2. Ensure raw material suppliers are reliable and reputable suppliers in providing quality raw materials.
3. Communicate with suppliers openly and clearly about wishes regarding the quality of raw materials.
4. Sorting each raw material sent before production.
5. Have reserves or alternative suppliers to address potential nonconformities or scarcity of raw materials.

## DISCUSSION

### *Raw Material Inventory*

The use of raw materials is the quantity or number of raw materials used in the production process. Sufficient inventory of raw materials according to needs can expedite the production process and can produce quality products. The purchase of raw materials in Mr. Marsan's peuyeum business is always in the same amount every day, because of this Mr. Marsan does not have a record of estimated use of raw materials. The purchase of raw materials in this business is obtained from *suppliers* or suppliers. Based on table 1 above, there are four raw material suppliers working with Mr. Marsan. These suppliers include Bogor, Sukabumi, Subang, and Lampung, each of which offers different prices. Price factors can be taken into consideration in making raw material purchasing decisions, because raw material prices can increase and decrease

(fluctuations). To anticipate fluctuations in raw material prices, there are several ways that Mr. Marsan does, including:

1. By having multiple suppliers and making long-term contracts with suppliers.
2. Establish cooperation with cassava farmers.
3. Have a reserve of raw materials.

In addition to the price factor that is taken into consideration in making raw material purchasing decisions, there are other factors as explained in table 2 above. Suppliers have their own advantages and disadvantages. Where from these advantages and disadvantages, Bogor and Subang are the main suppliers. Bogor and Subang were chosen as the main suppliers because they offer cheaper prices, cassava quality that suits needs, in addition to short shipping distances. With this advantage, cassava from Bogor and Subang is often the main choice compared to Sukabumi and Lampung.

The raw material used in making peuyeum is butter-type cassava. In this production, Mr. Marsan gets cassava butter from his four suppliers. Based on field observations obtained by the author, butter-type cassava was chosen as the raw material for peuyeum because it has a chewy and legit texture, besides that butter-type cassava has a fairly high starch content which if processed can get the desired texture.

#### *Anticipating Raw Material Quality Nonconformities*

In the peuyeum business, Mr. Marsan has his own quality standards to determine raw materials. To be able to compete and produce quality products and in demand by consumers, one important factor to achieve this is in the selection of raw materials. The quality of the raw materials used can affect the taste, quality, and safety of the products produced.

The quality of the raw materials used in Mr. Marsan's peuyeum production, including cassava used is a type of butter cassava because this type of cassava is denser and legit, besides that in making peuyeum cassava is needed that is not too old and hard,

but also not too young because cassava that is too old will be difficult to ferment.

The quality of raw materials from suppliers often does not conform to established quality standards. For example, the type of cassava sent is not appropriate, so it will affect the production of peuyeum produced. To anticipate that happening can be done in several ways, namely:

1. Establish clear specifications for the type of raw materials to be used.
2. Ensure raw material suppliers are reliable and reputable suppliers in providing quality raw materials.
3. Communicate with suppliers openly and clearly about wishes regarding the quality of raw materials.
4. Sorting every raw material sent before production.
5. Have reserves or alternative suppliers to address potential nonconformities or scarcity of raw materials.

By applying some of these methods, it can reduce the risk of non-conformity in the quality of raw materials and maintain product quality consistently.

## 5. CONCLUSION

Based on research that has been conducted on "Analysis of Raw Material Inventory in Mr. Marsan's Peuyeum Business in Batujaya Karawang District" it can be concluded as follows:

1. Sufficient inventory of raw materials according to needs can expedite the production process and can produce quality products. The raw material used in making peuyeum is butter-type cassava. The purchase of raw materials in Mr. Marsan's peuyeum business is always in the same amount every day, because of this Mr. Marsan does not have a record of estimated use of raw materials. There are four suppliers of raw materials working with Mr. Marsan, namely Bogor, Subang, Sukabumi, and Lampung. Suppliers have their own advantages and disadvantages. Where from these

advantages and disadvantages, Bogor and Subang are the main suppliers. Bogor and Subang were chosen as the main suppliers because they offer cheaper prices, cassava quality that suits needs, in addition to short shipping distances. With this advantage, cassava from Bogor and Subang is often the main choice compared to Sukabumi and Lampung.

2. In preventing or reducing the risk of non-conformity in the quality of raw materials, several efforts are made, one of which is to sort or check each raw material sent before production.

From these discussions and conclusions, there are suggestions that the author can give, including:

1. By managing raw material inventory efficiently, peuyeum businesses can maintain and increase their competitiveness in the market. Supplier reliability can help meet the amount of demand according to consumer desires. Good cooperation with suppliers can reduce the risk of supply instability.
2. Monitoring raw materials regularly before production can reduce the risk of non-conformity in the quality of raw materials.

## REFERENCES

- [1] M. G. Eni Harmayani, Umar Santoso, "Traditional Indonesian Food Series 1: Fermented Food Group and ... - Eni Harmayani, Umar Santoso, Murdijati Gardjito - Google Books," *UGM PRESS*, 2019.
- [2] Muhamad Akbar, "148320060 - Muhammad Akbar - Fulltext," *repositori.uma.ac.id* Pp. 15–77, 2018.
- [3] I. Hesti Umiyati, "Analysis of Elements of Raw Material Inventory Control and Product Quality on Cost Efficiency," *J. Sekr. Adm.*, vol. 17, pp. 67–74, 2019.
- [4] D. A. Lestari, S. S. Atmadja, S. Tinggi, I. Ekonomi, and M. Surabaya, "ANALYSIS OF RAW MATERIAL INVENTORY ON CV . HOLOPIS DAYA BERSAMA SURABAYA," pp. 300–323, 2021.
- [5] B. S. Gerung and I. D. Palandeng, "Analysis of Raw Material Inventory at Boulevard D'Coffee Aceh Manado," *J. Tumewu 515 J. EMBA*, vol. 9, no. 3, pp. 515–522, 2021.
- [6] S. H. Erwin Dyah Astawinetu, "FINANCIAL MANAGEMENT : THEORY AND PRACTICE - Google Books," *Sco2 Media Pustaka*, 2020.
- [7] M. Anwar, "Fundamentals of Corporate Financial Management - Google Books," *Prenada Media Group*, 2019.
- [8] L. Sa'adah, "Financial Management – Lailatus Sa'adah – Google Books," *LPPM Universitas KH. A. Wahab Hasbullah*, 2020.
- [9] Farah and Margaretha, "Theory & Application of Financial Management," *books.google.co.id*, pp. 2–3, 2022.
- [10] K. Azwar, A. Mulyana, and rfan S. Himawan, "Introduction to Accounting - Google Books," *Tohar Media*, 2022.
- [11] A. R. A. et al. Renika Hasibuan, Erna Hendrawati, "Intermediate Financial Accounting - Google Books," *Get Press*, 2022.
- [12] A. Barley *et al.*, "CHAPTER II-Literature Review, Framework and Hypothesis," *Corresp. Analysis*, no. 15018, pp. 1–23, 2022.
- [13] H. & Render, "Inventory analysis," *J. Chem. Inf. Model.*, vol. 53, no. 9, pp. 1689–1699, 2013.