



ANALYSIS OF BUSINESS AND MARKETING MARGINS SALES OF SUBSIDIZED FERTILIZER BETWEEN DISTRIBUTORS AND FERTILIZER RETAIL KIOSKS IN THE WORK AREA OF CV. SASAK AGROTANI LOMBOK BARAT DISTRICT

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Abstract

This study aims "to determine the magnitude of the need for fertilizer at the fertilizer kiosk adjustment level, business efficiency and marketing margins for subsidized fertilizer sales from fertilizer distributors to adjustment kiosks. This study uses a quantitative descriptive method by means of a survey of the sample population taken by 10 kiosk respondents who were determined purposively (purposive).

Discussion of research results related to business efficiency and Subsidized Fertilizer Marketing Margins between Distributors and Subsidized Fertilizer Retail Kiosks in the work area of CV. Sasak Agrotani then are as follows:

The amount and allocation of fertilizer needs at the farmer level is in accordance with the recap in the Group Needs Initiative Plan (RDKK) in which the amount and allocation is distributed by subsidized Fertilizer Retail Kiosks at HET prices and prices above the HET prices ranging from IDR 2,300 to IDR 2,450. The difference in the selling price of fertilizer to farmers is caused by the additional cost of transportation costs and admin costs for reporting kiosks that are listed to Fertilizer Producers.

The marketing margin for fertilizer from distributors to fertilizer processing kiosks up to the selling price to farmers is Rp. 218.2. lowest price compared to marketing channel 1 Marketing Channel 2 kiosk entrepreneurs who buy subsidized fertilizers get the lowest total marketing margin and the farmer's share is the highest.

In accordance with the need for fertilizer during the rice planting season, there is an additional allocation for working areas in kiosks that are subject to fertilizer to meet the demand for fertilizer from farmers during the planting season.

Keywords: Business Efficiency, Marketing Margins, Fertilizer Retail Kios

INTRODUCTION

Background

The condition of agricultural land in Indonesia is depreciating every year, especially productive agricultural land, this is the impact of economic development and development progress both at the village level and in urban areas. The narrowing of land or the reduction of agricultural land is caused by the development of areas both for settlements and for the construction of government offices and the development of industrial estates. The impact caused by the narrowing of agricultural land is that rice production will decrease, especially for urban areas where most of the productive land has been used by developers for residential

development. The rapid shrinkage of agricultural land is influenced by the high demand for food by the people, as a result of the expansion of urban development, the large amount of idle or barren land and high population growth so that they need boards other than food.

The shrinking of agricultural land is increasingly complex due to the high rate of conversion of agricultural land to non-agricultural functions. According to the Central Bureau of Statistics (BPS) records, the area of paddy fields continues to decrease by around 110,000 ha/year. This reality, if left unchecked, sooner or later will cause various environmental impacts. (Bira Daily; co.id. 2021)

So, in general, the cause of agricultural land getting narrower is due to changes in land use or land conversion, which was previously productive land in the form of sawah or upland, which has turned into land that is completely unproductive. Some of the farmers are changing professions, they do this because being a farmer is considered unprofitable or always a loss, especially for farmers who own small land. To help farmers, the government issues various policies, one of which is the policy of subsidizing agricultural inputs in order to help smallholders and certain areas in increasing agricultural production.

The implementation of government policies in the agricultural sector, especially the agricultural input subsidy policy, is basically in order to increase the production capacity of agricultural land and to achieve food self-sufficiency throughout Indonesia. As stated by Dudi S, Hendraan (2011), fertilizer subsidies aim to increase food production and farmers' income. Especially for the supporting areas for national rice storage, such as West Nusa Tenggara, one of the areas included as a national rice producing area or as a national rice storage area.

West Nusa Tenggara Province has considerable potential for the development of agricultural land. According to data taken from SP Lahan in 2013, NTB has 247,434 hectares of paddy fields, 1,097,767 hectares of non-rice fields and 650,903 hectares of non-agricultural land. The paddy field area includes the area of rice planted (one time, two times and three times). Non-paddy field area in the form of dry fields/gardens, fields/huma, temporarily uncultivated land, others (plantations, community forests, ponds, ponds/reservoirs/ponds, etc.). Non-agricultural land in the form of settlements, offices, roads and others. The Directorate General of Agricultural Infrastructure and Facilities in 2013 carried out a program to expand the area/print of rice fields covering an area of 5,700 ha which were distributed on Lombok Island covering an area of 1,000 Ha and Sumbawa Island covering an area of 4,700 Ha (Department of Agriculture, Food Crops and Horticulture; 2013). In 2019, NTB targeted a rice planting area of 368,000 hectares and 16,000 hectares of rice planting area in the fields. Meanwhile, in 2020, the target for planting area is 350,000 hectares of paddy fields and 130,000 hectares for planting in fields with a target of achieving 2.6 million tons of rice production. (Department of Agriculture and Plantation, Suara NTB 2019).

One of the districts in the province of West Nusa Tenggara is West Lombok district which has a fairly large area of rice fields compared to other districts, but the problems that arise in agricultural activities are inseparable from the conditions in the field, such as when facing the rice planting season. The problem recently faced by West Lombok Regency is that nearly 500 tons of subsidized fertilizer were not absorbed by the farmers and were withdrawn from their distribution. This confirmation was conveyed by Lobar DPRD member H. Jumahir to Suara NTB, Thursday, January 16 2020. It was explained that the basis for determining the allocation of fertilizer was the Group Needs Definitive Plan (RDKK) made by each group. The RDKK and their summary were submitted to each retailer where this group made the redemption of fertilizers (Suprianto. et al. 2021)

The RDKK recap from each of these villages, he added, was made at the retailer level to be submitted to the distributors. Then in terms of land volume and the amount of subsidized fertilizer packages listed in the RDKK, for urea fertilizer is 250 kilograms per hectare. While those who are borne by the subsidy, farmers

who have a maximum land area of 2 hectares, if more than that, they have to buy non-subsidized fertilizers. The problems that farmers often complain about include retailers in all sub-districts. These retailers are also targeted by distributors to buy non-subsidized fertilizers, even though there are no orders from farmers or farmer groups in RDKK, but it is required.

Fertilizer retail kiosks as an extension of fertilizer distributors or as partners in the distribution of subsidized fertilizers have a very strategic role in order to meet the fertilizer needs of farmers/farmer groups at the appropriate prices mandated in the Ministry of Agriculture regulations, namely selling at the Highest Retail Price (HET). The problem now is whether these prices reach the hands of buyers or farmers according to the demand in RDKK. Subsidized fertilizer retail kiosks as well as entrepreneurs will of course benefit from the sale of these fertilizers and the amount of sales profit depends on the selling price, operational costs and transportation costs in delivering fertilizer to farmers/farmer groups. For this reason, this research is aimed at analyzing fertilizer retail kiosk businesses by looking at marketing margins from subsidized fertilizer sales.

The need for fertilizer by farmers when it is needed, sometimes the stock of fertilizer at the fertilizer retailer level is not available, the reason is the delay in the distribution of fertilizer from distributors so that farmers feel disadvantaged in terms of time and cost. Therefore it is necessary to conduct research related to the sale of subsidized fertilizers and marketing margins based on prices from distributors to retail kiosks and HET at the farmer/farmer group level in West Lombok Regency, West Nusa Tenggara Province.

Formulation of the problem

The distribution of subsidized and non-subsidized fertilizers from the distributor line to the farmer level is crucial to the success of farmers in their farming business to increase production and this is very dependent on the supply of fertilizer to farmers so that the price is right, the time and the right dosage is used.

Based on the background above, the problems to be studied are:

1. To what extent is the need for fertilizer at the retail kiosk level for the needs of farmers contained in the farmer group e-RDKK.
2. What are the marketing channels and marketing costs of subsidized and non-subsidized fertilizers from fertilizer distributors to the level of fertilizer retailer kiosks and prices at the farmer level.
3. How big are the profits and marketing margins of subsidized and non-subsidized fertilizers at the fertilizer distributor and retail kiosk level.

Research purposes

1. To find out the amount of subsidized fertilizer needed at the farmer level with the allocation at the retail kiosk level.
2. To analyze marketing channels and marketing costs of subsidized fertilizers from distributors to farmer kiosks and farmers/farmer groups
3. To analyze the profit and marketing margin of subsidized and non-subsidized fertilizer sales at the fertilizer retailer kiosk level.

LITERATURE REVIEW

Definition of Agriculture

Agriculture in a broad sense means activities in the processing of a land, which is then developed in the planting process and so on. So as to produce staples such as food, vegetables and so on. In the true sense that has been described from sources of agricultural science, the term agriculture is a human activity in utilizing biological resources to produce food, industrial raw materials, and new energy sources. Some experts also mention the notion of agriculture which includes the following:

1. The definition of agriculture according to David Ray Griffin is a matter that is misunderstood, complicated, often overlooked, and also unwanted.
2. The definition of agriculture according to Van Arsten (1953) is human activity in obtaining results originating from plants or from animals which were originally achieved by means of a deliberate way in perfecting the possibilities, which have been given by nature to breed these plants or animals.
3. The definition of agriculture according to Mosher (1996) is a unique form of production, which is also based on the growth process of plants and animals. Farmers will manage and stimulate growth in plants and animals, in farming. Where production activities are a business, so expenses and income are very important.

So far, input subsidies such as fertilizer, wage rates, agricultural land area and capital, have never been associated with a direct effect on rural household consumption, see for example the results of research reported by Sudharyanto and Rosmiayati (1990). They regard the household as a pure consumer as postulated by conventional demand theory. It is fifth if one considers a farming household as a pure consumption product or as a pure production unit. Farm households produce mainly food production, part of the production is consumed, the rest is sold to the market.

Likewise, the labor used in farming, including small farmers, some come from outside the family. Therefore, farming households are more accurately described as a mixture of producers and consumers.

Agricultural Development.

National development is basically a process of structural change in the social and economic fields. The process of change must be a dynamic process and lead to better progress from one stage to the next, oriented towards meeting basic needs (basic good). One of the basic needs is food, where food is one of the most basic human needs.

One of the government's roles in achieving national development is to provide subsidies for the agricultural sector. Subsidies are a form of government assistance to reduce the burden on society by paying part of the price that should be paid by the community or certain groups of people to provide goods or services concerning the interests of the lives of many people.

According to Suparmoko (1994: 38-40 cited by Emidayenti) subsidies are classified into:

- a) Subsidies in the form of money. In this case the government can provide subsidies in the form of money as additional income to consumers or the government can also provide subsidies in the form of reduced prices of goods. This means that in consuming a good, consumers are only required to pay less than the actual price of the good and the difference will be borne by the government.

- b) Goods subsidies, if the government provides a certain type of goods with a certain amount to consumers without being charged or maybe with a fixed payment below the market price. One form of government subsidy in realizing food security (increasing productivity) is by providing fertilizer subsidies. The fertilizer subsidy is the government's effort to ensure the availability of fertilizer for farmers at a price set by the government, namely the Highest Retail Price (HET).

According to the Regulation of the Minister of Agriculture No.42/Permentan/OT.140/09/2008 concerning the need for and the highest retail price (HET) of subsidized fertilizers for the agricultural sector for the 2009 fiscal year, subsidized fertilizers are fertilizers whose procurement and distribution are managed at the Highest Retail Price (HET)) specified at an authorized dealer in line IV

Subsidized Fertilizer

Fertilizer is a commodity that has a strategic role in supporting the agricultural sector. Using the right fertilizer can increase the productivity of agricultural commodities, one of which is rice productivity. The policy objective of providing fertilizer subsidies is to ease the burden on farmers in supplying and using fertilizers for their farming activities so as to increase productivity and production of agricultural commodities to support national food security. The target recipients of subsidized fertilizers are food crop, horticulture, gardeners, breeders who cultivate a land area of up to 2 (two) hectares per planting season per farming family except for fish and or shrimp cultivators with an area of up to 1 (one) hectare.

The policy of providing fertilizer subsidies for the agricultural sector began from 2003 to 2008. In 2009, the government again provided a fertilizer subsidy budget of Rp. 16.5 trillion for the procurement and distribution of Urea, Superphos, ZA, NPK, and organic fertilizers totaling 8,223. 000 tons, with the highest retail price (HET) for each type of fixed fertilizer, except for organic fertilizer, which fell below 2008. Fertilizer is one of the basic needs in agriculture to obtain maximum yields. To realize food self-sufficiency, the government subsidizes several types of fertilizers such as Urea, ZA, SP-36, Phonska and Petroganik. So what is the price of the fertilizer? So far, it has been selling subsidized and non-subsidized fertilizers. According to him, the subsidized fertilizer price has been determined by the government based on Minister of Agriculture Regulation No. 60/Permentan/SR.310/12/2015.

Types of Specifications, Quantity and Prices of Subsidized Fertilizers

Subsidized fertilizers that are traded are subsidized fertilizers as intended/based on the applicable government regulations as follows:

- a) Regulation of the Minister of Trade of the Republic of Indonesia that applies along with additional rules and amendments regarding the Procurement and Distribution of Subsidized Fertilizers for the agricultural sector.
- b) Regulation of the Minister of Agriculture of the Republic of Indonesia that applies along with additional rules and amendments regarding the Need and Highest Retail Price (HET) of subsidized fertilizers for the agricultural sector.

- c) Terms and policies of PT. Pupuk Indonesia (Persero) and/or PT. Petrokimia Gresik which deals with subsidized fertilizers.

The sale of subsidized fertilizers is carried out by two parties, namely the first party, in this case the Distributor, sells to the second party, in this case the retail kiosk, buys and receives subsidized fertilizer with the following types, packaging, specifications, quantities and prices: (Sasak Agrotani; 2022)

The highest retail price for Urea, ZA, SP-36, NPK, Organic Granul fertilizers is the maximum selling price or Highest Retail Price (HET) for farmers/farmer groups including Value Added Tax (VAT) as follow

Table 2. Subsidized Fertilizer Sales Prices in 2022

Type of Fertilizer Distributor	Selling Price Neatly arranged in the Farmer's Warehouse (IDR /ton/liter)	Kiosk HET to Farmers/Farmers Groups (IDR per kg/liter)
Urea	2.181.818,00	2.250,00
ZA	1.631.818,00	1.700,00
SP – 36	2.331.818,00	2.400,00
NPK	2.231.818,00	2.300,00
Organik Granul	731.,818,00	800,00

The Highest Retail Price (HET) as stipulated in paragraph (1) of the article on the sale and purchase agreement between distributors and fertilizer retail kiosks is the highest price for urea, ZA, SP-36, NPK in a 50 kg container, while petroganic fertilizer is in a 40 kg container, fertilizer Ponska Oca in 1 liter containers paid in cash by farmers/farmer groups to retail kiosks (Kios Tani).

Meanwhile, the price of non-subsidized fertilizer is far from the price of subsidized fertilizer. For example, non-subsidized ZA type fertilizers are now sold at IDR 5,000 per kg or IDR 150,000-295,000n per 50 kg, PHONSKA Plus type fertilizers and GEMARI liquid fertilizers are offered at prices. The following table contains a complete list of non-subsidized fertilizer prices on the Indonesian market.

Definition of Marketing

In general, marketing is a business activity aimed at distributing goods and services from producers to consumers in order to provide satisfaction from the exchange of goods and services, namely between sellers and buyers. According to Sa'id et al (2001; 59), marketing is all business activities aimed at providing satisfaction from goods or services exchanged with consumers or users. So marketing is a combination of activities that bring together buyers and sellers in an exchange in a place called the market or other places where producers provide their products and buyers come to buy these products.

Marketing is a process and managerial in which individuals and groups get what they need and want by creating, delivering, and exchanging value with other parties (Bakari, Indriani; 2013).

In marketing, there is a flow of goods from producers to consumers by involving marketing intermediaries. All marketing intermediary institutions play a very important role in determining marketing channels, because if it consists of a long marketing chain, the marketing costs incurred will be greater.

All economic activities, including marketing, also require efficiency. According to Mubyarto (1989), a marketing system is considered efficient if it fulfills two conditions, namely:

1. Being able to convey the results of producer farmers to consumers at the lowest possible cost.
2. Being able to make a fair distribution of the total price paid by the end consumer to all parties who have participated in the production and marketing activities of said commodity.

The definition of fair here is the comparison between the sacrifices incurred and the benefits obtained by each marketing component are in balance.

According to Soekartawi (2002), marketing costs are costs incurred for marketing purposes, including transportation costs, sorting costs, packaging costs, and labor costs used. The more efficient marketing is done, the smaller the marketing costs incurred. The amount of marketing costs differ from one another due to: (a) types of commodities, (b) marketing locations, (c) types of marketing agencies and (d) effectiveness of marketing carried out.

Marketing channel

Marketing channels or marketing distribution are means that bridge the products produced by producers so that these products reach the hands of the final consumers. In marketing activities there are several channels through which producers deliver their products to the market and this is a link in the chain of activities in marketing. According to Pranata Gama et al, (2015), agricultural marketing distribution channels organize agricultural commodities from producers to consumers, through several marketing channels:

1. Zero Level Channel, where this zero level channel is also known as a direct channel, meaning that producers sell their goods directly to consumers, so in this case producers do not use intermediaries.

The flow: Producers → Customers

2. Channel one level (One Level Channel), called a level one channel because there is only one intermediary agency, where intermediary agencies for consumer goods in general are through retailers.

The flow: Producers → Retailers → Customers (Consumers)

3. The second level channel (To Level Channel), is called the second level channel because there are two intermediaries and for consumer goods in general the intermediary agencies are wholesalers and retailers.

The flow: Producers → Wholesalers → Retailers → Customers

4. Multi-Level Channel, called a multi-level channel because it involves many intermediaries, this is usually in addition to wholesalers and retailers there are also collector traders and each intermediary mixes other intermediaries, and usually this form of channel is more suitable for marketing / distribute consumer goods and non-industrial goods.

the plot:

Producers → Wholesalers → Distributors (→ Customers → Retailers

By looking at the marketing chain above, there are differences in costs and prices received by each marketing agency. According to ranatagama, et al (2015), said that the shorter the chain of trade of an agricultural product, then:

1. Marketing/trade management costs are getting lower;
2. Marketing/trafficking margins are also getting lower;
3. Prices that consumers have to pay are also getting lower

4. Prices received by producers are getting higher.

A distribution channel is a series of interdependent organizations involved in the process of making a good or service ready for use or consumption. According to (Swarna, 2006) a distribution channel is a group of traders and corporate agents who combine physical transfer and the name of a product to create uses for a particular market. Distribution channel Members of the distribution channel carry out a number of functions. The function of the distribution channel is the activities carried out by members of the distribution channel in moving goods from producers to consumers and creating uses for these products for consumers.

Marketing Margins

In general, marketing margin is the difference in the price of an item received by producers and the price paid by consumers. To see marketing efficiency through margin analysis, we can use the distribution of the profit margin ratio or profit margin ratio (RPM) at each marketing agency involved in the marketing process. The profit margin ratio is the comparison between the level of profit earned and the costs incurred by each marketing agency concerned. Marketing margin is the difference between the price received and the price paid by the final consumer. The size of the price difference at the final consumer level will be influenced by the number of marketing agencies involved in the marketing process, the length or shortness of the channels traversed and the distance to the market.

According to Khol and David Downey (1972) defining marketing margin is the ratio between the added value obtained by certain marketers from the price paid by consumers...

So marketing margin is a term used to express the difference in the price paid to the first seller and the price paid by the final buyer. Marketing costs will be higher if many marketing channels are involved in the marketing agency for a product before the product reaches the final consumer

All economic activities, including marketing, require efficiency. There are four types of criteria that can be used as indicators of marketing efficiency, namely (1) marketing margins, (2) prices at the consumer level, (3) availability of physical and marketing facilities, and (4) level of market competition. However, marketing margin indicators are used more often because marketing margin analysis can determine the level of operational efficiency (technology) and price efficiency (economics) of a marketing (Soekartawi; 2006).

Mathematically, the calculation of marketing margin is formulated as:

$$m_{ji} = P_{si} - P_{bi} \text{ or } m_{ji} = b_{ti} + \pi_i \dots\dots\dots(18)$$

The total marketing margin in a particular marketing channel is formulated as:

$$M_{ji} = S_{mji} \dots\dots\dots(19)$$

The spread of marketing margins can be seen based on the percentage of profits to marketing costs (Margin Profit Ratio/RPM) in each marketing agency, which is formulated as (Soekartawi; 2006):

$$RPM = \dots\dots\dots(20)$$

- where : m_{ji} = Margin at the i-level marketing agency
- M_{ji} = Total margin on the i-th marketing channel
- P_{si} = selling price at the marketing agency level i-th (i=1,2,3,, n)
- P_{bi} = Purchase price at the marketing agency level i-th
- b_{ti} = marketing costs for the i-level marketing agency

- π_i = Profit of the i-level marketing agency
- P_r = Price at consumer level
- P_f = Farmer's price (producer)

Marketing Channel Analysis is an organizational tool that is interdependent on one another, both in providing products or services used by consumers. Marketing agencies aim to market products and adjust demand and supply. Efficient marketing channels can reduce gaps or risks that will occur, such as the risk of late delivery or misplaced ownership.

Margins can show added value from farmers to consumers. This farmer analysis can be used to analyze the marketing system from a macro perspective (product marketing from farmers to consumers). The formula for marketing margin can be seen as follows:

$$MT = P_r - P$$

Information :

- MT = Total Margin
- P_r = Price at consumer level (IDR/kg)
- P_f = Price at producer level (IDR/kg)

Farmers share

Farmer share is the percentage of the price received by producers with the price paid by consumers. Several things affect farmer share, including the level of processing, transportation costs, number of products, and product durability. Farmer share is negatively related to marketing margin. If the marketing margin is higher, then the portion received by the farmer will be lower. Farmer share can be calculated by the formula:

$$FS = \frac{P_f}{P_r} \times 100 \text{ percent}$$

Information :

FS= Percentage received by Farmers (price share)

Previous research

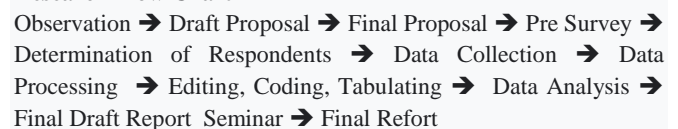
Some of the results of previous research studies underlying this research are related to "Analysis of costs and marketing margins of processed agro-industrial products in the Seganteng area, Sandubaya District, Mataram City, namely as follows:

Research conducted by Suprianto.Dkk (2021) is research on "Effectiveness of Distribution of Subsidized Fertilizers by Fertilizer Distributors to the Farmer Level Through Farmer Groups (Case Study in West Lombok Regency)" where 96% of the distribution of subsidized fertilizers is said to be effective both in terms of price, type of fertilizer, quantity and timely delivery.

Narmin and Made Antara's research (Agrotekbis, 2016), concerning Revenue Analysis and Marketing of Tofu in the "AFIFAH" Industry in Palu City, Central Sulawesi "the aim of the research is to determine marketing channels, and marketing margins for the Afifah tofu industry, where 1) producers sell their products to retailers then the retailer sells it to the final consumer, 2) the producer sells his product directly to the final consumer. Tofu marketing margin on the first channel is IDR 33,000.- while the marketing margin on the second channel is free of charge, because the producers directly sell it directly to consumers.

RESEARCH METHODS

Research Flow Chart



Types of research

This study uses a descriptive analysis method, namely to examine the status of human groups, an object, a set of conditions, a system of thought or a class of events in the present (Nazir; 2011). The descriptive method describes events in a systematic, factual and accurate manner regarding the facts, nature and relationships between the phenomena studied. This study aims to make a systematic picture or picture of the distribution of fertilizer from line I to line III of retailers to farmer groups.

Place and time of research

This research was conducted in West Lombok Regency covering the Narmada sub-district and Gunung Sari sub-district which were determined purposively which were fostered by the distributor CV. Sasak Agrotani. The object of this study is the retailer of subsidized fertilizer as a supplier of fertilizer to farmers in farmer groups. The research period required is 6 (six) months, starting from May to November 2022.

Data Type

This study uses primary data and secondary data to support the analysis. Primary data were obtained directly from respondents, namely the owners of subsidized fertilizer retailer kiosks who are members of the CV distributor fostered. Sasak Agrotani. While secondary data is data obtained from related agencies such as the BPS of West Lombok Regency, Farmers Kiosks and Fertilizer Distributors in the West Lombok region, and various literature related to this research.

Method of collecting data

The data collection method used in this study was a survey method, namely by collecting data directly on the object under study by taking a sample of 10 respondents from fertilizer retail kiosks using purposive sampling according to research needs. Data collection was carried out by direct observation with interview techniques using prepared questionnaires, as well as using literature studies.

Determination of Respondents

The determination of respondents was carried out by random sampling, which was divided into two categories, namely fertilizer retail kiosks (farmer kiosks) located in the Narmada sub-district and Gunung Sari sub-district. A sample of 10 subsidized fertilizer retailer kiosk respondents from a population of 28 business units. Sampling of farmer respondents was carried out by random sampling, namely by drawing lots until 10 units of fertilizer retailer kiosks were selected in West Lombok district.

Data analysis

Analysis was performed using both primary data analysis and secondary data analysis. Secondary data analysis is used to describe various analytical practices that use existing data, either to investigate new research questions or to re-examine key research questions for corroboration purposes. Secondary data analysis is usually very suitable for statistical data that has been complete and well documented. As for the analysis of primary data using survey methods.

The purpose of survey research is to examine the characteristics of the entire group to be studied or the population by examining a sub-set of the population group, hereinafter referred to as the sample. The results of the survey on the sample are then generalized or applied to the population. Survey research is usually defined as a study or study of large groups through direct research of a subset (sample) of that group.

The techniques used include: (1) structured interviews; (2) respondent group questionnaires or study focus which will be useful to find out the responses of participants to answer research questions.

To calculate the accuracy and suitability of price indicators and the dosage of fertilizer use will be calculated using the formula the following. Pricing Accuracy

$$dP = Pr - Pp \dots\dots\dots 1)$$

Information :

dP = price difference (IDR/Rp)

Pr = price received by respondents (IDR/Rp)

Pp = highest retail price (HET) from the government (IDR/Rp)

Appropriate Dosage of Fertilizer Use

$$dQ = Qr - Qp \dots\dots\dots 2)$$

Information :

dQ = amount difference (kg/ha)

Qr = amount of fertilizer used by the respondent (kg/ha)

Qp = amount of fertilizer recommended by the government (kg/ha)

1. Business Analysis

Business analysis of subsidized fertilizer sales by subsidized fertilizer retail kiosks is carried out by economic analysis, namely as follows:

A. Calculating Total Revenue (TR)

Total revenue (total revenue) from a business can be obtained from the multiplication of the amount of production produced by the selling price of the product. Mathematically acceptance is written by the formula:

$$TR = P \times Q$$

Where :

TR = Total Revenue (total revenue) Fertilizer retail kiosk business (IDR/Rp)

P = Product price (IDR/Rp)

Q = Total production (unit)

B. The profit of a fertilizer retail kiosk business is the final result of revenue minus the total cost of production.

Mathematically, profit is written by the formula:

$$\pi = TR - TC$$

Information:

π = Profit (IDR/Rp/month)

TR = Total Income (IDR/Rp/month)

TC = Total Cost (IDR/Rp/month)

C, Business Efficiency Analysis

The calculation of business efficiency used is the Revenue Cost Ratio (R/C Ratio). R/C Ratio is the comparison between revenue and costs. Mathematically it can be written as follows:

$$RC\text{ratio} = \text{Total Penelier} (= TR / TC)$$

Where:

If $R/C > 1$ then agro-industry business is profitable to work on.

If $R/C < 1$ then agro-industry business is not profitable to be cultivated.

If $R/C = 1$ then the agro-industry business breaks even, namely the business provides the same amount of revenue as the amount issued.

D, Marketing Performance Analysis

This analysis is used to determine the marketing channel for processed agro-industrial products in the city of Mataram, besides that this marketing channel determines the size of the costs

incurred from producers to consumers. According to Pranatagama (2015; 22), distribution channels that are too long cause more and more links to be involved. This means the possibility of spreading the product widely, but incurring greater costs so that the price of the product becomes expensive when it reaches the consumer, in other words, the producer's profit is small.

Marketing Margin Distribution

Margins can show added value from producers to consumers. This margin analysis can be used to analyze the marketing system from a macro perspective (product marketing from producers to consumers). The formula for marketing margin can be seen as follows:

$$MT = Pr - Pf$$

Information :

MT = Total Margin

Pr = Price of potatoes at the consumer level (IDR/Rp/kg)

Pf = Price of potatoes at farm level (IDR/Rp/kg)

4. Farmer Shares

Farmer share is the percentage of the price received by producers with the price paid by consumers. Several things affect farmer share, including the level of processing, transportation costs, number of products, and product durability. Farmer share is negatively related to marketing margin. If the marketing margin is higher, then the portion received by the farmer will be lower. Farmer share can be calculated by the formula:

$$FS = \frac{P_f}{P_r} \times 100 \text{ percent}$$

Information :

FS= Percentage received by Producers

RESULTS AND DISCUSSION

Description of the Research Area

The research was carried out in West Lombok Regency which is the work area of the distributor of CV. Sssak Agrotani which covers three sub-districts namely Labuapi sub-district, Narmada sub-district and Gunungsari sub-district which oversees 28 fertilizer retail kiosks as partners between fertilizer distributors CV. Sasak Agrotani. Of the three working areas, the farmer's kiosk sells subsidized fertilizer from the government whose sales are specifically for farmers who are included in a farmer group that has been registered in the Group Needs Definitive Plan (RDKK) according to the area of land managed by farmers. Fertilizer retail kiosks

are an extension of distributors and work partners in preparing fertilizer needs according to what is allocated in the RDKK so that at the time of redemption of fertilizer, farmers can go through the head of the farmer group or can buy it directly or buy it directly at the fertilizer retailer kiosk in the working area of the retailer's kiosk. As an illustration of the existence of fertilizer retail kiosks in the working area of CV. Sasak Agrotani in West Lombok Regency are as follows:

Table 1. Allocation of Subsidized Fertilizers to Retail Kiosks in the Work Area of CV. Sasak Agrotani

No	District and Fertilizer Retail Kiosk	Types of Subsidized Fertilizer			
		NPK	Urea	Za	Organic
1	Gunungsari	200	0	100	40

	District				
2	Narmada District	500	0	100	60
3	Labuapi District	300	0	100	50
4	Batulayar District	150	0	50	50
	Disbursement Amount	1.150	0	350	200

Source: CV. Sasak Agrotani

From the description of the data in table 1 above, the amount of fertilizer allocated to each retail kiosk is based on the data contained in the Group Needs Initiative Plan (RDKK) which has been given to each retail kiosk in the work area of CV. Sasak Agrotani in West Lombok Regency.

Subsidized Fertilizer Marketing

Subsidized fertilizer marketing through several marketing channels or chains that will distribute subsidized fertilizer in its sales involves several stick holders so that the sale of this subsidized fertilizer will be purchased by farmers. Marketing is a very important activity in a business or business carried out by distributors to fertilizer retail kiosks that will sell them to farmers in their respective work areas. Subsidized fertilizer marketing chain in the research area is carried out by Fertilizer Producers, Distributors and Retail Kiosks.

Pictures of Subsidized Fertilizer Marketing Channels:

MANUFACTURER → DISTRIBUTOR → FERTILIZER RETAIL KIOSKS → FARMERS

The producer here is PT. Petrokimia Gresik, namely as a producer of subsidized fertilizers that distributes subsidized fertilizers to distributors in the West Nusa Tenggara region, especially here in the West Lombok Regency area, one of which is held by the distributor CV. Sasak Agrotani according to the distributor appointment letter Number: 2469/B/HK.01.02/70/SP/2021 which has the address at Jalan Terartyai No 1 Kota Mataram and the appointment as a retailer kiosk for subsidized fertilizer PT. Petrochemical Gresik Number: 33/SPJB/SAT.PKG.2021 . PT. Petrokimia Gresik as a producer will distribute subsidized fertilizer according to the type and highest retail price (HET) to the distributor, in this case the distributor CV. Sasak Agrotani, namely with the specifications of the types of fertilizers and prices as follows:

Table 2. Selling Prices of Subsidized Fertilizers to Farmers According to the 2022 HET

Fertilizer Type	Selling Price Distributor to Retail Kiosk ((Rp/Ton/liter)	Selling Price of Retail Kiosk to Farmers (Rp//Kg/liter)
Urea	2.282.818,00	2.250,00
ZA	1.631.818,00	1.700,00
SP- 36	2.331.818,00	2.400
NPK	2.231.818,00	2.300

Organic Granul	731.818,00	800
Organic liquid	19.318,00	20.000

Source: Distributors CV. Sasak Agrotani

The Highest Retail Price (HET) is stated based on a decision on the applicable regulation of the Minister of Trade of the Republic of Indonesia along with additional rules and amendments regarding the Procurement and Distribution of Subsidized Fertilizers for the agricultural sector. The two applicable Regulations of the Minister of Agriculture of the Republic of Indonesia along with additional rules and amendments concerning "The Need and Highest Retail Price (HET) of subsidized fertilizers for agricultural retail. Third, the provisions and policies of PT> Pupuk Indonesia (Persero) and/or PT. Petrokimia Gresik which deals with subsidized fertilizers.

The flow of subsidized fertilizer purchases from distributors obtains subsidized fertilizer through a valid purchase from PT, Petrokimia Gresik, in accordance with the applicable provisions contained in the Subsidized Fertilizer Sales and Purchase Agreement. And then the distributor will distribute the sale of subsidized fertilizer to retail kiosks in the target area or CV. Sasak Agrotani with prices according to HET. The highest retail price (HET) may change during the validity period of this agreement in accordance with applicable government regulations.

Subsidized Fertilizer Sales

The sale of subsidized fertilizers to retail outlets is handled by the distributor, in this case CV. Sasak Agrotani as a distributor of subsidized fertilizer from PT. Petro Kimia Gresik, which sells ZA, NPK Plus SP36, SP 26 and Petroganik fertilizers in the working area of West Lombok district, Labuapi sub-district, Narmada sub-district and Gunung Sari sub-district and Batulayar sub-district with a total of 30 retail outlets. For research purposes, 10 (ten) retail kiosks that specifically sell subsidized fertilizers were taken. The following are the names of the kiosks and data on subsidized fertilizer sellers for July 2022, as follows:

Table 3. Fertilizer Sales Data at Retail Kiosks for June 2022

No	Retailer Kiosk Name	NPK	ZA	SP 36	Organic	POC
1	UD. Al Ikhlas	4.000	-			
2	UD. Arif Tani	10.000	-	-	2.000	27.000
3	UD. Pemuda Jaya	3.000	-	-	-	-
4	UD. Simpan g Kayun	2.000	-	-	-	-
5	UD. Arif Makmur	8.000	-	-	-	-

6	UD. Alam Subur	5.000	-	-	-	-
7	UD. Aulia	16.000	-	-	-	-
8	UD. Tricu Jaya	10.000	-	-	5.000	-
9	UD. Serba Usaha	14.000	-	-	-	-
10	Wire Sance Koptan	8.000	-	-	3.000	-

Data Source: Primary data is processed

Sales of subsidized fertilizers at retail outlets are dominated by the redemption of NPK Plus fertilizer which is much requested by farmers in the second planting season, in addition to demand for subsidized ZA, organic and liquid organic fertilizer (POC). Redemption of subsidized fertilizer by the kiosk is based on the allocation of requests in the farmer group RDKK which is then submitted to the distributor for redemption according to the number of needs of the farmers in the farmer group. Based on farmers' requests from each farmer group, the request for subsidized fertilizer will be forwarded by the retail kiosk to the distributor for redemption.

Table 4. Subsidized fertilizer sales prices from distributors, retail kiosks, farmers

No	Retailer Kiosk	Type Fertilizer NPK ORG PCO	Distributors (HET) (IDR/kg)	Retail Kiosk Prices (IDR / kg)	Selling Price Farmers (IDR /kg)
1	UD. Al Ikhlas	4000	2.231,818	2.300	2300-2400
2	UD. Arif Tani	10000 5000	2.232/731	2300/800	800 - 1000
3	UD. Pemuda Jaya	3000	2.231,818	2300	2300-2400
4	UD. Simpang Kayun	2000	2.231,818	2300	2300-2400
5	UD. Arif Makmur	8000	2.231,818	2300	2300-2400
6	UD. Alam Subur	5000	2.231,818	2300	2300-2450
7	UD. Aulia	16000	2.231,818	2300	2300-2450
8	UD. Tricu	10000 3000	2231.731	2300/800	2400/1000

	Jaya				
9	UD. Serba Usaha	14000	2.231,818	2300	2300-2450
10	Wire Sance Koptan	8000 2000	2.231,818	2300	2300-2450

Source: Attachment data processed

Look at the list of subsidized fertilizer sales prices from distributors to fertilizer retail kiosks and to user farmers, where the average selling price for this type of NPK fertilizer is 2,231.818 per kg or IDR 2,231,818 per ton. Meanwhile, for granular organic fertilizer, the selling price from the distributor is Rp. 731,818, while the selling price from the distributor to the retail kiosk is for NPK fertilizer, which is Rp. 2,300 per kg, and the price of granular fertilizer purchased by the farmer's kiosk is Rp. 800 per kg. Meanwhile, retail kiosks sell to farmers with the highest retail price

(HET) of IDR 2,300 per kg. There are those who sell above the HET price due to consideration of the transportation costs charged to the retailer's kiosk if the farmer buys fertilizer from the retailer's kiosk to ask for it to be delivered to the farmer's land location. or the farmer's house.

Subsidized Fertilizer Retail Kiosk Sales Revenue

Revenue is the remuneration received by producers from production activities or sales of goods or services. Revenue received from the business of selling subsidized fertilizer by retail kiosks is obtained from the difference between the selling price minus the purchase price of fertilizer for one month. The amount of income received is influenced by the selling price of the product, such as subsidized fertilizer referring to the HET price, the price difference that occurs from the HET price due to additional sales costs such as transportation costs incurred by retail kiosks which are charged to farmers buying fertilizers. How much revenue from the sale of fertilizer by farmer retail kiosks can be seen in the following table:

Table 5. Fertilizer Sales and Fertilizer Retail Kios Revenue in July 2022

Kiosk Name	Type Fertilizer NPK/ POG	HET (IDR/kg)	Income from HET (IDR)	Average Selling Price (IDR/kg)	Income (IDR)	Difference in Income from HET
UD. Al Ikhlas	4000	2.300	9.200.000	2.375	9.500.000	300.000
UD. Arif Tani	10000	2300	23.000.000	2.350	23.750.000	750.000
UD. Pemuda Jaya	3000	2300	6.900.000	2.350	7.050.000	150.000
UD. Simpang Kayun	2000	2300	4.600.000	2.375	4.750.000	150.000
UD. Arif Makmur	8000	2300	18.400.000	2.375	19.000.000	600.000
UD. Alam Subur	5000	2300	11.500.000	2.375	11.875.000	375.000
UD. Aulia	16000	2300	36.800.000	2.375	38.000.000	1.200.000
UD. Tricu Jaya	10000	2300	23.000.000	2.400	24.000.000	1.000.000
UD. Serba Usaha	14000	2300	32.200.000	2.375	33.250.000	1.050.000
Wire Sance Koptan	8000	2300	18.400.000	2.375	19.000.000	600.000

Source: Attachment data processed

As an illustration of the results of selling fertilizer at HET prices and retail kiosk selling prices to farmers, there is a difference in price, which is an average of around Rp. 75 per kg, the difference in price from the HET price is because the retail kiosk is burdened with transportation costs to the location or shipping costs. and administrative costs for monthly reporting online or by submitting hard copies of sales reports to distributors and distributors. The difference in income received from the HET price and the current price is used to pay for unexpected expenses and if this is charged to the HET price income, the retail kiosk will have less or less income. The greater the volume of sales from farmer kiosks, the income received by fertilizer retailer kiosks will increase and this depends on the demand for fertilizer by farmers.

Fertilizer Sales Business Efficiency

The efficiency measure in this study is used to determine whether the fertilizer retailer kiosk business is feasible or not feasible in the business world, especially in the business of servicing agricultural supporting products in addition to the sale of fertilizers and medicines, seeds and so on. However, in this study the focus is on the sale of subsidized fertilizers, the selling price of which has been determined using the HET price benchmark.

Table 6. Calculation of Fertilizer Sales Business Efficiency at the Retail Kiosk Level

Kiosk Name	Total Revenue (TR)	Total Cost (TC)	R/C Ratio = TR/TC	Efficiency
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UD. Al Ikhlas	300.000	116.000	2,58	Efficient
UD. Arif Tani	750.000	250.000	3,0	Efficient
UD. Pemuda Jaya	207.000	150.000	1,38	Efficient
UD. Simpang Kayun	150.000	75.000	2,0	Efficient
UD. Arif Makmur	1.050.000	600.000	1,75	Efficient
UD. Alam Subur	375.000	145.000	2,59	Efficient
UD. Aulia	1.200.000	350.000	3,43	Efficient
UD. Tricu Jaya	1.690.000	400.000	4,23	Efficient
UD. Serba Usaha	2.016.000	750.000	2,68	Efficient
Wire Sance Koptan	1.052.000	600.000	1,75	Efficient

Subsidized Fertilizer Marketing Margin

Marketing margin is the difference between the price received by the producer and the price at the final consumer level. The price difference is due to expenses for marketing and the profits received by each marketing agency involved in the distribution of organic fertilizers. In the world of business, marketing is an important factor for conveying the messages of the products produced to the level of consumers who use the product. This marketing activity is accompanied by the distribution of goods sold and the process related to marketing costs must be efficient. Referring to the opinion of Sukartawi (1993), that the factors used as a measure of marketing efficiency include profits, marketing, prices received by consumers, availability of adequate marketing physical facilities for the smooth sale and purchase of goods, storage, transportation and market competition and competition between marketers. The marketing channel in this study is the distribution of subsidized fertilizers from the distributor level to the farmer's kiosks and up to the user farmers. As an illustration of the calculation of subsidized fertilizer marketing margins can be seen in the following table:

Table 7. Efficiency of Subsidized Fertilizer Marketing Channels at Distributor and Retail Kiosk Levels

No	Lembaga Pemasaran	Price (IDR)	Share (%)		DM (%)	
			Ski	Sbi	Ski	Sbi
1. Fertilizer Distributor						
1.	a) Fertilizer Selling Price	2.231,8		91,90		
2. Fertilizer Retail Kiosk						
	a) Purchase Price	2.231,8				
	b) Labor Cost	50	-	2,04	-	22,94
	c) Transportation cost	25	-	1,02	-	11,46
	d) Selling Price	2.450	-	91,09		
	e) Profit	143,2	5,84	3,06	65,68	34,12
	d) Price to farmers	2.450	100,00			
3. Fertilizer Retail Kiosk 2						
	a) Purchase Price	2.231,8				
	b) Labor Cost	40	-	1,67	-	23,78
	c) Freight transport	25	-	1,04	-	14,86
	d) Selling price	2.400	-	92,9		
	e) Profit	103,2	4,3	-	61,36	

Calculation Example data table 7 :

$$MP = Pf - Py \rightarrow 2.450 - 2.231,8 = 218$$

Distributors

$$a) \text{ Share (\%)} \setminus \text{Ski} = 2.231,8 / 2.450 \times 100 \% = 91,90$$

2. Retail Kiosks with selling prices to farmers IDR 2,450/kg

a) Shares (%)

$$\text{Ski Labor Cost} = 50 / 2.450 \times 100 = 2,04$$

$$\text{Ski Transportation Cost} = 25 / 2.450 \times 100 = 1,02$$

$$\text{Ski Gain} = 143,2 / 2.450 \times 100 = 5,84$$

DM (%)

$$\text{Sbi; labor costs} = 50 / 218 \times 100 \% \rightarrow 22,93$$

$$\text{Sbi; transportation costs} = 25 / 218 \times 100 \% \rightarrow 11,47$$

1. Distributors

$$A) \text{ Share (\%)} \rightarrow \text{Ski} = 2.231,8 / 2.400 \times 100 \% = 92,9 \%$$

2. Retail Kiosks with average sales of IDR 2,400/kg

$$MP = Pf - Py \rightarrow 2.400 - 2.231,8 = 168,2$$

a) Shares (%)

$$\text{Sbi labor costs} = 40 / 2.400 \times 100 \% \rightarrow 01,67 \%$$

$$\text{Sbi transportation costs} = 25 / 2.400 \times 100 \% \rightarrow 01,04 \%$$

$$\text{Ski gain} = 103,2 / 2.400 \times 100 \% \rightarrow 04,3 \%$$

DM (%)

Sbi; labor costs = $40/168.2 \times 100\% \rightarrow 23.78$

Sbi; transportation costs = $25/168.2 \times 100\% \rightarrow 14.86$

These calculation numbers serve as an illustration in determining the amount of marketing costs and marketing margins as well as the efficiency of subsidized fertilizer marketing from distributors to retail kiosks.

Table 8. Prices, Margin Distribution, Price Share and Marketing Efficiency of Subsidized Fertilizers.

Marketing Institutions And Margin Components	Price (IDR)	Share (%) Ski -- -- Sbi	DM (%) Ski -- - Sbi	Marketing Efficiency (%)
A. Subsidized Fertilizer				
1. Distributors - Selling Price	2.231,8	91,09		91,09
2. Retail Kiosk 1				
- Labor Cost	50	5,6	25	91,09
-	40	3,33	15	
- Transportation cost	2.450			
- Selling price	128,2	13,33	3,33	
- Profit	2.450	8,89	80	
3. Price to farmers			20	
B. Retail Kiosk 2 - Selling Price	2.231,8	92,91		92,91
Retail Kiosk				
- Labor Cost	40	6,25	25	92,91
- Freight cost	25			
- Purchase price	2.231,8			
- Selling price	2.400	18,75		
- Profit	103,2			
3. Price to farmers	2.400			

Source: Attachment data processed

Farmer share is the percentage of the price received by producers with the price paid by consumers. Several things affect farmer share, including the level of processing, transportation costs, number of products, and product durability. Farmer share is negatively related to marketing margin. If the marketing margin is higher, then the portion received by the farmer will be lower. Farmer share can be calculated by the formula:

$$FS = \frac{P_f}{P_r} \times 100 \text{ percent}$$

Information :

FS = Percentage received by Producers (price share)

Pr = Price at consumer level (IDR/Rp/kg)

Pf = Price at producer level (IDR/Rp/kg)

Note: If Fs > 50% , then marketing can be said to be efficient.

Farmer Share Retail Kiosk 1 :

$$FS = \frac{2.231.8}{2.450} \times 100\% = 91.09\%$$

So the marketing of subsidized fertilizers at the retail kiosk level is said to be efficient with a Farmer Share (FS) achievement of 91.09%.

Farmer Share Fertilizer retail kiosk 2 :

$$FS = \frac{2.231.8}{2.400} \times 100\% = 92.91\%$$

With a farmer share value of 92.91%. then the marketing of subsidized fertilizers at the retail kiosk level is already efficient. This means that the marketing of subsidized fertilizers at the retail kiosk level is said to be efficient because the FS > 50% is 92.91%.

Marketing Efficiency

After knowing the total marketing margin and farmer's share on the channel

Marketing 1, 2, and 3, it can be seen that all subsidized fertilizer marketing channels are included in the efficient marketing level. The three marketing channels are efficient based on each farmer's share which is above 50 percent. Besides that, several factors also underlie the three channels so that they become efficient marketing channels. These factors are costs, profits, distance, travel time, marketing facilities and infrastructure.

. In addition, the distribution of profits to each marketer is quite fair. Every profit obtained is in accordance with the marketing function carried out.

Based on the calculation results in table 4 it can be concluded that the most efficient marketing channel is in Marketing Channel 2. This is because the prices received by retail kiosks tend to be fixed and the prices paid by consumers occupy the lowest price position compared to marketing channel 1 Marketing Channel 2 retail kiosk entrepreneurs Subsidized fertilizers obtained the lowest total marketing margin and the highest farmer's share.

CONCLUSIONS AND RECOMMENDATIONS

Fertilizer sales from distributors to subsidized fertilizer retail kiosks with the highest retail price (HET) to farmers amounting to IDR 2,300. to location. However, most farmers who collect the fertilizer themselves, the price paid is Rp. 2,300. From 10 subsidized fertilizer retail kiosks from the income received during the month of June, if it is related to retail kiosk income with business efficiency, the R/C ratio value is above one (R/C ratio > 1), meaning that the selling of fertilizer by retail kiosks is efficient even though the average value is above one.

After knowing the total marketing margin and farmer's share in Marketing Channels 1, 2 and 3, it can be seen that all of the subsidized fertilizer marketing channels (Distributors → Retail Kiosks → Farmers) are included in the efficient marketing level. The two marketing channels are efficient based on their respective farmer's share gains which are above 50 percent. Besides that, several factors also underlie the three channels so that they become efficient marketing channels. These factors are costs, profits, distance, travel time, marketing facilities and infrastructure. In addition, the distribution of profits to each marketer is quite fair. Every profit obtained is in accordance with the marketing function carried out.

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