



# Effectiveness of Subsidized Fertilizer Distribution from Distributors through Farmers' Kiosks to the Farmers' Level (Case Study in West Lombok District)

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## ABSTRACT

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This research takes the title "Effectiveness of Subsidized Fertilizer Distribution From Distributors Through Farmers' Kiosk to Farmer Level (Case Study in West Lombok Regency). The purpose of the study was to determine the effectiveness of the subsidized fertilizer subsidy policy in its distribution from distributors to retail kiosks until it was accepted by farmers who were members of farmer groups. Determination of research areas purposively in two sub-districts, namely Narmada sub-district and Gunungsari sub-district, West Lombok district. The population in this study are farmers who are members of farmer groups who use subsidized fertilizers in processing their farming business. Determining the sample as many as 120 respondents were determined randomly by random sampling from each selected farmer group in the work area of the subsidized fertilizer retailer kiosk. The research method used to analyze and measure the effectiveness of subsidized fertilizer is descriptive qualitative and quantitative methods. by using four main indicators, namely, right place, right time, right quantity and right price.

The results showed that from the four indicators that were observed, it could be said that the distribution of subsidized fertilizer from the distributor to the farmer level. 83.0%, the aspect of suitability with a ratio of 74.45%, the aspect of the suitability of the amount of fertilizer with an average achievement percentage of 55.28% and the ratio ratio with a ratio of 43, 04%. If viewed from the five aspects of fertilizer presentation, the application of subsidized fertilizer seen from these five aspects is 69.24%, based on the fertilizer subsidy policy criteria (Permendagri; 2011) then the delivery of subsidized fertilizer in the research area is in the effective category.

With changes in government policy on fertilizer prices which are increasing at any time, farmers are expected to be able to use fertilizers according to the recommendations recommended by the government. In addition, to anticipate the general shortage of fertilizers, the government is currently selling non-subsidized fertilizers to farmers at quite high prices.

## Keywords:

Effectiveness, Fertilizer Distributor, Subsidized Fertilizer Retailer Kiosk

## I. PRELIMINARY

### 1.1. Background

The development of the industrial revolution 4.0 era faces serious challenges, this is related to the demand for various agricultural commodities produced by farmers in Indonesia and the world to meet the consumption of the Indonesian people which reaches approximately 260 million.

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A challenge that is quite heavy faced by the government and the people of Indonesia to deal with food problems that meet the needs of the community. Meanwhile, the area of rice fields is decreasing both in cities and in rural areas, most of which are designated for residential buildings, office buildings and shops and so on. If this situation is not carried out by adding land by opening new agricultural lands, our country will inevitably become the largest rice importing country in Asia.

The issue of food is very closely related to the existence of a potential and these things are subject to international pressure (Morgenthau, Han; 2010). In general, in developing countries

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such as Indonesia, to protect farmers, the government implements a policy of subsidizing agricultural inputs, including fertilizer subsidies. Subsidies in the agricultural sector by the government are a government commitment to develop the agricultural sector because most of Indonesia's population works and their livelihoods still depend on the agricultural sector.

The implementation of government policies in the agricultural sector, especially agricultural input subsidies, 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 buffer areas of the national rice barn, such as the West Nusa Tenggara area, one of the areas that is included as a national rice producing area or as a national rice barn.

West Nusa Tenggara Province has considerable potential for the development of agricultural land. According to data taken from SP Land in 2013, NTB has an area of 247,434 ha of paddy fields, 1,097,767 ha of non-agricultural land and 650,903 ha of non-agricultural land. The area of paddy fields includes the area of land planted with rice (once, twice and three times). The area of non-rice fields in the form of fields/gardens, fields/huma, land that is temporarily not cultivated, others (plantations, community forests, ponds, ponds/tebat/ponds, and others). Non-agricultural land in the form of settlements, offices, roads and others. In order to support the production of food crops and horticulture in terms of providing planting area, the Directorate General of Agricultural Infrastructure and Facilities in 2013 implemented a program to expand the area/printed rice fields covering an area of 5,700 ha distributed on the island of Lombok covering an area of 1,000 hectares and the island of Sumbawa covering an area of 4,700 hectares (Department of Plant Agriculture). Food 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 is to plant 350,000 hectares of paddy fields and 130,000 hectares of land in fields with a target of 2.6 million tons of rice production. (Department of Agriculture and Plantation, Suara NTB 2019).

Rice fields are agricultural land that is divided into plots and is limited by embankments (galengan), channels to hold/channel water, which is usually planted with lowland rice regardless of where it was obtained or the status of the land. This includes land registered with the Land Product Tax, Regional Development Fees, crooked land, serobotan land, swampland planted with rice and new cleared land. Rice fields include irrigated rice fields, rain fed, tidal rice fields, seepage, lebak and so on

The problem faced by West Lombok Regency recently is that almost 500 tons of subsidized fertilizer are not absorbed and distributed to farmers and withdrawn from distribution. This

affirmation was conveyed by a member of the Lobar DPRD H. Jumahir to Suara NTB, Thursday, January 16, 2020. It was explained that the basis for determining the allocation of fertilizer was the Definitive Plan for Group Needs (RDKK) made by each group. The RDKK and its recapitulation were submitted to each retailer where this group redeemed the fertilizer.

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Meanwhile, the Head of the Lobar Agriculture Service through the Head of Fertilizer, Pesticide and Alsintan I Wayan Sugiarta admitted that the fertilizer allocation for Lobar had decreased dramatically in 2020, following last year's fertilizer ration referring to the RDKK of 11 thousand tons, which can only be submitted through the E-RDKK online system. reached 7,100 tons or about 70 percent. So this has an impact on the allocation of Lobar fertilizer to be cut by four thousand. Apart from urea, the allocation of SP36 fertilizer also decreased by about 800 tons. With this allocation of fertilizers, it is estimated that fertilizers in Lobar will experience a deficit, so the Department of Agriculture also encourages groups to immediately submit E-RDKK to be proposed directly to the center.

Agricultural issues regarding land area play a very important role in order to produce rice production in one growing season, besides that, the role of institutions involved in distributing subsidized fertilizers from the government is also very decisive. The need for fertilizer by farmers when needed, sometimes the supply of fertilizer at the retailer level of the fertilizer kiosk is not available, the reason for the delay in distributing fertilizer from the distributor so that farmers feel disadvantaged in terms of time and cost. Therefore, it is necessary to conduct research related to the distribution of subsidized fertilizer from distributors to retailers (kiosks) to farmers whose redemption is through farmer groups in the area of West Lombok Regency, West Nusa Tenggara Province.

### **1.2. Formulation of the problem**

The distribution of subsidized fertilizers from the distributor line to the farmer level is crucial to the success of farmers in their farming to increase yields and this is very dependent on the supply of farmer fertilizers so that the right time and the right dose are used.

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

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1. To what extent is the need for fertilizer at the farmer level contained in the RDKK of farmer groups.

2. How is the effectiveness of the distribution of subsidized fertilizers (Line IV) for rice farmers in West Lombok Regency at MT I YEAR 2020, in terms of price accuracy, quantity accuracy, type accuracy, and timeliness.

1.3. Research purposes

1. To analyze how much subsidized fertilizer is needed at the farmer level with the existing allocation at the retail level.

2. To analyze the effectiveness of the allocation of subsidized fertilizers, it is received at the right time, at the right price, in the right quantity and in the right type at the farmer level through farmer groups.

### **II . LITERATURE REVIEW**

#### **2.1. Understanding Agriculture**

Agriculture in a broad sense means activities in the processing of a land, which is then developed in the process of planting and so on. So as to produce basic materials such as food, vegetables and so on. In the true sense that has been translated from agricultural science sources, 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 meaning of agriculture which includes the following:

1. Understanding agriculture according to David Ray Griffin is a problem that is misunderstood, complicated, often overlooked, and also unwanted.

2. Understanding agriculture according to Van Arsten (1953) is a human activity in obtaining results that originate from plants or animals which were initially achieved by deliberate means in perfecting the possibilities that have been given by nature to breed these plants or animals.

3. Understanding agriculture according to Mosher (1996) is a distinctive 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, within the farm. Which is where production is a business, so expenses and income are very important.

So far, input subsidies such as fertilizers, 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 households as consumers of mummies as postulated by conventional theory of demand. It is wrong if one considers farm households as imitators of mummy consumption or as production units of mummies. Farm households produce mainly food, 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 said to be a mixture of producers and consumers.

#### **2.2. 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 a better one from one stage to the next that is oriented to how to meet basic needs (basic good). One of the basic needs is food, where food is one of the most important basic human needs.

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

According to Suparmoko (1994: 38-40 cited by Emidayenti) the provision of subsidies is 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 lowering the price of goods. This means that in consuming a good, consumers are only required to pay less than the actual price of the goods 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 subsidies in realizing food security (increasing productivity) is to provide fertilizer subsidies. The fertilizer subsidy is an effort by the government to ensure the availability of fertilizer for farmers at prices set by the government, namely:

Highest Retail Price (HET).

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

Meanwhile, according to the Regulation of the Minister of Trade No.07/M-DAG/PER/2/2009 subsidized fertilizers are fertilizers whose procurement and distribution receive subsidies from the government for the needs of farmers which are carried out on the basis of government programs in the agricultural sector. The purpose of this fertilizer subsidy policy is to ease the burden on farmers in the supply and use of fertilizers for their farming activities so as to increase productivity and production of agricultural commodities in order to support national food security. The target recipients of subsidized fertilizers are farmers of food crops, horticulture, planters, breeders who cultivate a land as wide as 2 (two) hectares per planting season per farmer family except fish and or shrimp cultivators as wide as 1 (one) hectare.

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### 2.3. Subsidized Fertilizer.

Fertilizer is a commodity that has a strategic role in supporting the agricultural sector. The use of appropriate fertilizers can increase the productivity of agricultural commodities, one of which is rice productivity. The purpose of this fertilizer subsidy policy is to ease the burden on farmers in the supply and use of fertilizers for their farming

activities so as to increase productivity and production of agricultural commodities in order to support national food security. The target recipients of subsidized fertilizers are farmers of food crops, horticulture, planters, breeders who cultivate a land as wide as 2 (two) hectares per planting season per farmer family except fish and or shrimp cultivators with an area of 1 (one) hectare.

**Table 1. Subsidized fertilizers for the agricultural sector in 2009, by type**

Type of Fertilizer	Amount (Ton)	HET (Rp/Kg )
Urea	4.550.000	1.200
SUPERPOS	1.000.000	1.550
ZA	923.000	1.050
NPK Phonska 15-15-15	1.200.000	1.750
NPK Pelangi 20-10-20	50.000	1.830
NPK Kujang 30-6-8	50.000	1.586
Organik	450.000	500

**Source: Guidelines for the Implementation of Fertilizer Subsidy in 2009**

The fertilizer subsidy policy for the agricultural sector started from 2003 until 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 amounting to 8,223. 000 tons, with the Highest Retail Price (HET) for each type of fertilizer, except for organic fertilizer which fell below 2008. –

Fertilizer is one of the basic needs in agriculture to obtain maximum yields. To achieve food self-sufficiency, the government subsidizes several types of fertilizers such as Urea, ZA, SP-36, Phonska and Petroganik. So how much does the fertilizer cost? so far selling subsidized and non-subsidized fertilizers. According to him, the price of subsidized fertilizer has been determined by the government

based on the Regulation of the Minister of Agriculture no. 60/Permentan/SR.310/12/2015.

The highest retail price for UREA fertilizers is set at IDR 90,000/50 Kilograms, ZA IDR 70,000/50 Kilograms, SP-36 IDR 100,000/50 Kilograms, PHONSKA IDR 115,000/50 Kilograms, and PETROGANIK IDR 20,000/40 Kilograms .

### 2.4. Subsidized Fertilizer Price

Meanwhile, the price of non-subsidized fertilizer is far from the price of subsidized fertilizer. Like ZA fertilizer, said Sarimin, the retail price of ZA fertilizer is Rp 3,000/Kilogram (Rp 150,000/50 Kilogram). As for PHONSKA PLUS, it sells for Rp. 8,000/Kilogram (Rp. 400,000/50 Kilogram). There is also a GEMARI liquid fertilizer for IDR 90,000/liter.

**Table 1. List of Subsidized Fertilizer Prices in 2019**

Type of Fertilizer Subsidized	Price (IDR)
Pupuk Urea	90.000 per 50 kg (1.800 per kg)
Pupuk ZA	70.000 per 50 kg (1.400 per kg)
Pupuk SP-36	100.000 per 50 kg (2.000 per kg)
Pupuk NPK	115.000 per 50 kg (2.300 per kg)
Pupuk Organik	20.000 per 40 kg (500 per kg)

Meanwhile, the price of non-subsidized fertilizer is far from the price of subsidized fertilizer. For example, non-subsidized ZA fertilizers are now sold at a price of IDR 3,000 per kg or IDR 150,000 per 50 kg, PHONSKA Plus fertilizers are sold for IDR 8,000 per kg or IDR 400,000 per 50 kg, and

GEMARI liquid fertilizers are offered at a price of IDR 90,000 per liter. The following table is a complete list of prices for non-subsidized fertilizers on the Indonesian market.

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**Table 2. List of Non-Subsidized Fertilizer Prices in 2019**

Type of Fertilizer Non-Subsidized	Price (IDR)
Pupuk Urea Non-subsidi	250.000 per 50 kg
Pupuk SP-36 Non-subsidi	250.000 per 50 kg
Pupuk ZA Non-subsidi	150.000 – 162.500 per 50 kg
Pupuk NPK Mutiara Non-subsidi	450.000 per 50 kg
Pupuk NPK Pak Tani Non-subsidi	415.000 per 50 kg
Pupuk KCI Mahkota Non-subsidi	300.000 per 50 kg
Pupuk GEMARI (cair)	90.000 per liter
Pupuk ZK	8.900 per kg

The Highest Retail Price (HET) for subsidized fertilizer is the price applicable at Line IV distributors in cash in bags with a size of 50 kg for Urea, Superphos, ZA fertilizers and or 20 kg packages for NPK fertilizers and in 40 kg packages for Organic fertilizers.

In the effectiveness of the distribution of subsidized fertilizers, the emphasis is on

4 aspects, namely:

1. price accuracy
2. Quantity accuracy
3. type accuracy
4. punctuality

### 2.5. Previous Research

1. Research conducted by Khairunisya (2016), which is based on the results of calculations from data obtained in the field, shows that the distribution of subsidized fertilizers (in Line IV) for rice farmers in Trimurjo District, Central Lampung Regency in 2009, seen from the price accuracy, quantity accuracy, accuracy of type, and timeliness run very effectively that is equal to 95.68%. Knowing that this program has been implemented very effectively can illustrate that the distribution of subsidized fertilizers has been carried out in accordance with the standard guidelines for program implementation. Determination of the number of respondents based on calculations using the Slovin formula. The analytical method used is a quantitative method. To measure the effectiveness of the fertilizer subsidy policy, two main indicators are used, namely the right price and the right amount.

2. The results of Wahyu Ardianto's research (2013) show that the fertilizer subsidy policy is still categorized as ineffective based on the price of subsidized fertilizer at the retail level. The results show that 72.19 percent of farmers buy fertilizer at a price above the prevailing HET. Then in addition to HET in terms of fertilizer use by farmers, it is also not in accordance with the recommendations for balanced fertilization. The results of the study showed that 62 percent of farmers' use of farmer fertilizers was still below the recommendation and 12 percent above the recommended recommendation. From these results, it can be concluded that

the policy of subsidized fertilizer is still not effective. This can affect farmers' expenditures, in this case from the results of research the proportion of farmers' fertilizer expenditures is 11 percent. This expenditure is the second largest expenditure after expenditure for labor, it will indirectly affect the income of farmers. The amount of expenditure will reduce the amount of income that farmers will receive. Based on the results of the study, the average net income for one planting season from 100 respondents with an average land area of 3350.1 m<sup>2</sup> is Rp. 3,899.585

## III. RESEARCH METHODS

### 3.1. Research Flowchart

Observation Proposal Draft Final Proposal Pre Survey Determination of Respondents Data Collection Data Processing Editing, Coding, Tabulating Data Analysis Final Report Draft Seminar Final Report.

### 3.2. Types of research

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

### 3.3. Place and time of research

This research was carried out in West Lombok Regency covering the Narmada District and Gunung Sari District which were determined purposively. The objects in this research are farmers who are members of the Farmer's Group and farmer's stalls as well as distributors as fertilizer suppliers to farmer's stalls. The research period required is 6 (six) months, starting from May to November 2021.

### 3.4. Data Type

This study uses primary data and secondary data to support the analysis. Primary data is obtained directly from

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respondents, namely farmers who are members of farmer groups and farmer kiosks. While secondary data is data obtained from related agencies such as BPS West Lombok Regency, Kios Tani and fertilizer distributors in the area of West Lombok, and various literatures related to this research.

### 3.5. Method of collecting data

The data collection method used in this study is a survey method, namely by collecting data directly on the object under study by taking a sample of 90 farmers' respondents and 6 (six) respondents of fertilizer retailers' kiosks according to research needs.

### 3.6. Determination of Respondents

The determination of respondents is divided into two categories, namely farmers in farmer groups and fertilizer retailers (kiosks) located in Narmada and Gunung Sari sub-districts. The sample of farmer respondents was 90 farmers and 6 (six) Kios Tani retailers of subsidized fertilizer. The sampling of farmer respondents was carried out using a simple random sampling technique in each retailer's kiosk as many as 15 respondents were carried out randomly by lottery according to the RDKK data contained in the subsidized FERTILIZER Retailer Kiosk.

### 3.7. Data analysis

The analysis was carried out using primary data analysis and secondary data analysis. Secondary data analysis was used to describe various analytical practices that use existing data, either to investigate new research questions or to re-examine the main research questions for corroboration purposes. Meanwhile, for the purpose of the second study, namely to analyze the effectiveness of the distribution of subsidized fertilizers, the scoring method is used. Each question item in the questionnaire is made alternative. The tiered answers start from the lowest level with a score of 1 and the highest level with a score of 3, namely scoring with the criteria of 3 Appropriate, 2 Not Appropriate, 1 Not Appropriate to identify the extent to which the conditions experienced by farmers in the distribution of subsidized fertilizers are obtained and the following formulation is obtained:

Percentage of achievement =  $\frac{ij}{\text{ill}} / \text{ij Expectations } 100\%$

Where :

i = Variable to i

j = Respondent to j

To find out the achievement position of each question item, you can use

the level of achievement of expectations as follows:

Value 75 – 100 = Very Effective

Value 50 – 74 = Effective

Value 25 – 49 = Less Effective

Value 0-24 = Ineffective (Nairobi et al, 2003).

Effectiveness is a measure of success in the distribution of subsidized fertilizers based on 6 principles, namely the right

place, the right quantity, the right quality, the right price, the right time and the right type.

This study uses quantitative analysis, so respondents' answers to the questionnaire need to be changed in the form of numbers to quantify the data obtained, the available answers are scored in stages starting from the highest to the lowest. 1. Value 3 for alternative answer (a) which has a high category 2. Value 2 for alternative answer (b) which has a medium category 3. Value 1 for alternative answer (c) which has a low category The author uses these three answer choices because the respondent expected to be more focused in answering the questions given. The results of this answer will be presented in the form of table analysis. In alternative answers that use a rating by each column and the table shows the location of the values, as a consequence each tick in each column of answers shows a certain value (Arikunto, 2006).

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

Price Accuracy

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

Information :

dP = price difference (Rp)

Pr = the price received by the respondent (Rp)

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

Appropriate Dosage of Fertilizer Use

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

Information :

dQ = difference in quantity (kg/ha)

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

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

Price accuracy is measured based on formula (1). Based on this formula, it can be seen the difference between the actual price and the HET. After that, a comparison was made between respondents who bought subsidized fertilizer at a price according to HET and respondents who bought subsidized fertilizer at a price not according to HET.

The results of the comparison of respondents are transformed into percent. If the exact price presentation is equal to or greater than 80%, it can be concluded that the policy in determining the HET is appropriate and running well, but if the results show the opposite facts, the HET policy has not worked as it should. The last indicator in determining the effectiveness of the fertilizer subsidy policy is the correct amount indicator. The exact measurement of this amount is based on the difference between the actual amount and the amount that should be described in formula (2). Furthermore, a comparison is made between respondents who use fertilizers in accordance with the recommendations and respondents who use fertilizers not as recommended in the form of percent. If the percentage of respondents who use

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fertilizer as recommended is equal to or greater than 80%, it can be categorized as effective on the right number of indicators. The average percentage of the indicators is made in the form of a percent. If the average level of accuracy is equal to or more than 80 percent, it can be categorized that the fertilizer subsidy policy has been effective. Then, to determine the proportion of costs that have been incurred by farmers, it is calculated by dividing each of these costs by the total cost and then multiplied by 100 percent, the proportion of production costs in the form of percent will be obtained.

**IV. RESULTS AND DISCUSSION**

**4.1. Subsidized Fertilizer Distribution Mechanism**

The analytical study in this research is focused on four levels, namely on time, on the right amount, type of fertilizer and the price of subsidized fertilizer whether it is in accordance with the Highest Retail Price or HET. In accordance with the government's recommendation through the Ministry of Agriculture that the distribution of subsidized fertilizer is from Line I (Producer), Line II Large Warehouse (Province), Line III Regional Warehouse (Regency/City) and Line IV Distributor in each working area at the district and city levels. The distribution of subsidized fertilizers is generally carried out through the producer channel (line-I) in each province, such as in the province of West Nusa Tenggara, delivery of fertilizer by producers through the Lembar port, from the port of Lembar, the fertilizer goes to the warehouse (Line-II) from Line II, then fertilizer. distributed to distributors according to

the DO (delivery order) and by distributors it will be distributed to retail kiosks in the distributor's work area. Distributor for the district of West Lombok, namely CV. Sasak Agrotani whose working area includes Labuapi sub-district, Narmada sub-district, Gunung Sari sub-district and Batu Layar sub-district. In this study, samples of farmers were taken from kiosks retailing subsidized fertilizers located in Narmada sub-district and Gunungsari sub-district.

**4.2. Level of Subsidized Fertilizer Distribution in the Research Area**

The definition of effectiveness is the relationship between output and goals or it can also be said to be a measure of the extent to which the level of output has been utilized optimally in accordance with the achievement of goals. So the understanding of effectiveness in general is a condition that shows the level of success or achievement of a goal as measured by quality, quantity and time in accordance with what was previously planned. The effectiveness of an activity can be seen from the extent to which the output produced is as expected.

The role of farmer groups plays an important role because every farmer who will receive or buy subsidized fertilizers must have been registered in the RDKK (Definitive Plan for Group Needs) in accordance with the area and amount of fertilizer needs that have been recorded in the RDKK. The following is the data in table 1 below regarding the suitability of the purpose of fertilizer allocation:

**Table 1. Conformity of the Purpose of Subsidized Fertilizer Allocation at the Place of RDKK**

Alternative Answer	Quantity Respondents	Percent (%)	% Achievement=Real Value/Expected Value x 100 %
Fits	81	67.5	67.5
Inappropriate	18	15	10
Unsuitable	21	17.5	5.83
Total	120	100	83,33

**Source: Data processed from the Appendix**

If you look at the data display in table 1, it shows that 67.5 percent of the total respondents (81 respondents) stated that the purpose of the allocation of subsidized fertilizer was in accordance with the retail kiosk in the area or place listed in the RDKK in the research area, namely the Narmada sub-district and Gunung sub-district. Sari. Meanwhile, 18 respondents who received subsidized fertilizers (15%) with a percentage of 10%, stated that the purpose of allocating subsidized fertilizers at the destination and proposed location was not in accordance with the given RDKK. Furthermore, as many as 21 farmer respondents (17.5% with a percentage of achievement of 5.83% stated that the purpose of the allocation of subsidized fertilizer to the destination was not in accordance with the given RDKK.

**4.2.1. Exact Amount**

In the process of submitting the RDKK of farmer groups in each sub-district office (KCD) the branch office of the agricultural service is guided by field extension officers (PPL) who collect data on farmers in each farmer group according to the existing land area data by cultivating different types of plants. paddy rice. The mechanism for submitting the RDKK in the research area is in accordance with the vast expanse of farmers' land for which the data is submitted by the local agriculture office, in this case the Food Crops Agriculture Service of West Lombok Regency, where the RDKK data is obtained from each agricultural KCD at the sub-district level. The following is how the suitability of the amount of subsidized fertilizer allocated to the needs in the RDKK from distributors to retail kiosks is as follows:

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**Table 2. Accuracy of the Amount of Subsidized Fertilizer Allocation at the RDKK Submission Place**

Alternative Answer	Quantity Respondents	Percent (%)	%Achievement=Real Value/Expected Value x 100 %
Fits	32	26,67	26,67
Inappropriate	28	23,33	15,56
Unsuitable	60	50	16,67
Total	120	100	58,90

Source: Data processed from the Appendix

**4.2.2. On time**

The accuracy in the distribution of subsidized fertilizers is very decisive in accordance with the requests submitted by farmers through their farmer groups, so that at the time the

fertilizers can be used as needed. The results of the survey of field data collection related to the accuracy of the distribution of subsidized fertilizers are as follows:

**Table 3. Timeliness of Subsidized Fertilizer distribution**

Alternative Answer	Quantity Respondents	Percent (%)	%Achievement=Real Value/Expected Value x 100 %
Fits	98	81,67	81,67
Inappropriate	8	6,67	4,45
Unsuitable	14	11,66	3,89
Total	120	100	90,01

Source: Data processed from the Appendix

The table 3 data above shows that 98 respondents or 81.67 % stated that the availability of subsidized fertilizers at the time needed for rice plants requires fertilizer distribution from distributors to retail kiosks to group farmers on time. In addition, 14 respondents in the distribution of subsidized fertilizers stated that the timing was not right because when needed, not all fertilizers were available during the growing season and this condition was caused by the farmers themselves who were late to make redemptions. Looking at the data from the interview, the distribution of fertilizers in terms of timeliness does not have any obstacles and problems,

because retail kiosks have already redeemed subsidized fertilizers for stock in warehouses.

**4.2.3. Quantity Match**

The suitability of the distribution of subsidized fertilizers refers to the data during the submission process to the RDKK, the amount is in accordance with the needs of the farmers themselves in developing their farming business. The RDKK redemption and submission system is a provision that has been approved by the local Agriculture Service by looking at the vast expanse of land owned by farmers in cultivating sauté rice farming. As an illustration of the following data table 4 below:

**Table 4. Conformity of Amount in Distribution of Subsidized Fertilizer According to RDKK Data**

Alternative Answer	Quantity Respondents	Percent (%)	%Achievement=Real Value/Expected Value x 100 %
Fits	30	25	25
Inappropriate	6	5	3,33
Unsuitable	84	70	23,33
Total	120	100	51,66

Source: Data processed from the Appendix

The data depiction in table 4 shows that of the total respondents as many as 16 respondents or 25% with the percentage of achievement of 25% which stated that the amount of subsidized fertilizer allocated was in accordance with the number of needs in the RDKK proposed by farmers in their farming business. Furthermore, 6 respondents or 5% with the percentage of achievement of 3.33% stated that the amount of fertilizer allocated was not in accordance with the

needs in the RDKK. Meanwhile, 70 respondents or 70% with an achievement percentage of 23.33% stated that the amount of subsidized fertilizer received was not in accordance with what was allocated in the RDKK. This is due to a reduction in the allocation of subsidized fertilizer from the producer PT. Pupuk Kaltim to distributors which has an impact on reducing the redemption allocation at retail kiosks. As a substitute, the



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government sells non-subsidized fertilizers to farmers who need fertilizer in their rice plants.

**4.2.4. On time**

Accuracy in the distribution of subsidized fertilizers is very decisive in accordance with requests submitted by farmers through their farmer groups, so that fertilizers are used according to their needs at the time of planting.

**Table 4. Timely Distribution of Subsidized Fertilizer**

Alternative	Answer	Quantity Respondents	Percent (%)	%Achievement=Real Value/Expected Value x 100 %
Fits		98	81,67	81,67
Inappropriate		8	6,67	4,45
Unsuitable		14	11,66	3,89
Total		120	100	90,01

Source: Data processed from the Appendix

From the data display above, it shows that as many as 98 respondents or 81.67 % stated that the availability of subsidized fertilizers when farmers needed them. In addition, 14 respondents in the distribution of subsidized fertilizer stated that it was not on time because when needed fertilizer was not all available during the growing season and this condition was caused by the farmers themselves who were late in making redemptions.

**4.2.5. Exact Type**

The type of fertilizer ordered by farmers depends on the needs of the plants cultivated by the farmers and usually farmers order various types of fertilizers according to their needs in developing their farming business. The types of fertilizers sold by the kiosk retailers of subsidized fertilizers include ZA, Ura, onska, SP 36 and NK lus fiber organic fertilizer.

**Table 5. Appropriateness of Subsidized Fertilizer Types allocated to Farmers**

Alternative	Answer	Quantity Respondents	Percent (%)	%Achievement=Real Value/Expected Value x 100 %
Fits		70	58,33	58,33
Inappropriate		8	6,67	4,45
Unsuitable		42	11,66	11,67
Total		120	100	74,45

Source: Data processed from the Appendix

The data in table 5 above shows as many as 70 respondents (58.33 % with an achievement percentage of 58.33%, stating that the type of subsidized fertilizer allocated is in accordance with the RDKK proposed by farmers through their farmer groups. While as many as 8 respondents (6.67%) fulfills the needs in the RDKK with a percentage achievement of 4.45% stating that the types of subsidized fertilizers allocated to farmers are not in accordance with those proposed by farmers in the RDKK. Furthermore, as many as 42 respondents or (35.0%) with an achievement percentage of 11.67% stated that the types of subsidized fertilizers proposed in the RDKK were not in accordance with the demand. This indicated that the types of subsidized fertilizers

allocated by the government to farmers were not appropriate, but most of the farmers who received subsidized fertilizers with real needs stated that the subsidized fertilizer distribution program was was appropriate.

**4.2.6. Right Price**

Price is a unit of value paid by farmers in purchasing subsidized fertilizers which are expressed in units of rupiah per kilo gram. The price of subsidized fertilizer varies according to the type of fertilizer and the price recommended by the government which refers to the Highest Retail Price (HET) for all types of subsidized fertilizer distributed by fertilizer producers to fertilizer distributors to subsidized fertilizer retailer kiosks.

**Table 6. Price Conformity of Subsidized Fertilizer with the Highest Retail Price**

Alternative	Answer	Quantity Respondents	Percent (%)	%Achievement=Real Value/Expected Value x 100 %
Fits		10	8,33	8,33
Inappropriate		15	12,5	8,33
Unsuitable		95	79,17	26,38
Total		120	100	43,04

Source: Data processed from the Appendix

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From the data display above, it shows that most or 95 respondents or (79.17%) with a percentage achievement of 26.38% stated that the fertilizer price paid by farmers was not in accordance with the Highest Retail Price (HET), this is because there is an additional transportation costs or the cost of transporting fertilizers from retailer kiosks to farmers. Furthermore, 10 respondents or (8.33%) with an achievement percentage of 8.33% stated that the price of subsidized fertilizer was in accordance with the Highest Retail Price (HET), and as many as 15 respondents or (12.5%) with an achievement percentage of 8.33% stated that the price of subsidized fertilizer they paid was not in accordance with the HET.

**4.2. Effectiveness of Subsidied Fertilizer Distribution**

The definition of effectiveness is the relationship between output and goals or it can also be said to be a measure of how

far the level of output has been utilized optimally in accordance with the achievement of goals. So the level of effectiveness is generally defined as a condition that shows the level of success or achievement of a goal as measured by quality, quantity and time as previously planned.

Effectiveness in the distribution of fertilizers intended in this study is related to the results in its implementation with the distribution of subsidized fertilizers and if it is said to be positive if the use of subsidized fertilizers gives real results that are in line with expectations. Or in other words, the use of subsidized fertilizers by farmers can increase real production yields that are greater than the original production. The results of the research on 120 farmer respondents who received subsidized fertilizer based on the RDKK they submitted in the Narmada sub-district and Gunungsari sub-district, West Lombok regency are as follows:

**Table 7. Effectiveness of Subsidied Fertilizer Distribution seen from 5 indicators**

No	Indicator of Achievement	Percentage Assessment (%)
1	PLACE FITNESS	83,33
	- Conformity of the Purpose of Subsidized Fertilizer Distribution with and Place proposed in RDKK - Everage	83,33
2	SUITABLE QUALITY	58,90
	-The Accuracy of the Amount of Subsidized Fertilizer Allocation Fertilizer application	51,66
	- Conformity of the Amount of Subsidized Fertilizer with the Farmers accepted - Everage	55,28
3	TIMELINESS	90,01
	-Availability of Subsidized Fertilizer when needed in MT 1 - Everage	90,01
4	SUITABLE TYPES OF FERTILIZER	74,45
	-The suitability of the type of subsidized fertilizer allocated farmer - Everage	74,45
5	PRICE COMPATIBILITY	43,04
	-Compatibility of Subsidized Fertilizer Prices with HET - Everage	43,04
	Total Average	69,24

Source: Primary data processed

The effectiveness of fertilizer distribution in the research area when viewed from several indicators used, namely location accuracy, quantity suitability, time accuracy, type suitability and price suitability in table 7 above, can be sorted as follows:

1. Aspect of timeliness with an average percentage of 90.01%
2. The suitability aspect of the place with the percentage of achievement of 83.33%
3. Aspects of the suitability of the type of fertilizer with an average percentage of 74.45%

4. Aspects of the suitability of the amount of fertilizer with the average percentage of achievement of 55.28%

5. The aspect of price conformity with the average achievement percentage of 43.04 %

From the results of the study, if the effectiveness of distributing subsidized fertilizers is seen from the five aspects, the average percentage of achievement is 69.24%, then the distribution of subsidized fertilizers in the research area, Narmada sub-district and Gunungsari sub-district, West Lombok district is in the effective category. Although there

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are some aspects that are not appropriate, in general, farmers do not object or complain to the institution that distributes subsidized fertilizers, namely the fertilizer producer PT. Pupuk Kaltim and PT. Petro Kimia Gersik.

### V. CONCLUSIONS AND SUGGESTIONS

Based on the results of the analysis and discussion in research on the effectiveness of subsidized fertilizer distribution in West Lombok district, it can be concluded as follows:

1, The mechanism for distributing subsidized fertilizers from distributors to fertilizer retailers to group farmers has been implemented in accordance with the five points, namely the right place, the right amount, the right time, the right type and the right price. From the results of the field study, the implementation still does not fully refer to the guidelines for distributing subsidized fertilizers, such as the amount of fertilizer does not match that in the RDKK because there is a reduction in the allocation from fertilizer producers. Likewise, most farmers receive prices above the Highest Retail Price (HET) because farmers are charged with transportation costs for farmers who are far away.

2, The effectiveness of the distribution of subsidized fertilizers in Narmada sub-district and Gunungsari sub-district, West Lombok district, the overall average percentage of the achievement rate is 69.24%, this shows that the distribution of subsidized fertilizer in West Lombok district is said to be quite effective.

#### 2. Suggestions

1, Local governments through relevant agencies should check directly on the field to avoid discrepancies in the price of subsidized fertilizer and the amount distributed to refer to HET and RDKK

2, To further increase the effectiveness in distributing subsidized fertilizers in West Lombok Regency, stakeholders should work together from producers to distributors, channeled to farmer groups through retail kiosks so that the right time, quantity and price refer to HET.

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