



Analysis of The Scarcity of Fuel Oil on The Economy of The People in Nunukan, Indonesia

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Abstract

Analysis of the scarcity of fuel oil on the economy of the people in Nunukan, Indonesia. Fuel is one of the driving elements in the economy. Therefore, the scarcity of general fuels, especially gasoline and biodiesel, has a very broad impact on various aspects of life. The phenomenon of fuel scarcity is a big problem that is still a major topic in Indonesia. Especially in Nunukan, North Kalimantan Province. The scarcity of fuel has hampered community activities. This phenomenon triggers traffic jams due to long queues at each gas station stating the availability of fuel, especially Peralite and Biosolar fuels which have been subsidized by the government. Therefore, this study aims to determine the causal factors, and the impact of the scarcity of fuel oil on the economy of the people in Nunukan. The method used in this research is descriptive qualitative analysis method. The results showed that the scarcity of fuel was caused by factors. The scarcity was caused by several factors including delays in the supply of fuel, misuse of subsidized fuel, behavior of retail traders, and setting quotas. As a result of these factors, the scarcity of fuel has an impact on the agricultural sector, Small and Medium Enterprises, the fisheries sector, and the household sector. Based on this research, the authors suggest to the government to take strict action against retail traders, and to gas stations to ensure timely fuel purchases so as not to cause delays in the supply of fuel.

Keywords: - Scarcity, subsidized fuel oil

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1. Introduction

Fuel is a material that can be converted into energy, one form of fuel is fuel oil. Fuel has become a basic need for all groups of people.

Fuel oil is a strategic and vital commodity that controls the lives of many people so that the government is obliged to ensure its smooth distribution throughout the territory of the Unitary State of the Republic of Indonesia. According to the Regulation of the Minister of Energy and Mineral Resources no.16 of 2011 article 10 point 5, dealers can only distribute fuel oil directly to users of land transportation through the facilities of Public Fuel Filling Stations. And according to article 4 point 2, namely dealers carrying out distribution activities for sea transportation, dealers can control the facilities and infrastructure.

Fuel is one of the driving elements in the economy. Therefore, the scarcity of general fuels, especially gasoline and biodiesel, has a very broad impact on various aspects of life. The sector most affected by the impact is the transportation sector.

This scarcity of course occurs due to the influence of various factors including the lack of supervision from the Regional Government. One of the main tasks and functions of the Regional Government is to supervise the running of the government, including overseeing the parties agreed to be the management of gas stations.

The phenomenon of fuel scarcity is a big problem that is still a major topic in Indonesia. Especially in Nunukan district, North Kalimantan Province. The scarcity of fuel has hampered community activities, especially fishermen and the Nunukan community who use private two-wheeled and four-wheeled vehicles. This phenomenon also triggers

traffic jams due to long queues at each gas station stating the availability of fuel, especially Pertalite and Biosolar fuels which have been subsidized by the government.

1.2 Problem Formulation

Based on the background described above, the researcher formulates the problem as follows:

1. What are the causes of the scarcity of subsidized fuel in Nunukan.
2. What is the impact of the scarcity of subsidized fuel on the economic activities of the people in Nunukan.

1.3 Research Objectives

Based on the formulation of the problem above, the objectives of this study are as follows:

1. To find out the causes of the scarcity of subsidized fuel in Nunukan District.
2. To find out the impact of the scarcity of subsidized fuel on the economic activities of the people in Nunukan District.

2. Literature Review

2.1 Scarcity Theory

According to Badudu, scarcity is a condition in which the item is difficult to obtain due to a limited amount (Big Indonesian Dictionary, 1926). Scarcity is the gap between limited economic resources and unlimited necessities of life. Scarcity arises because human needs continue to increase. As a result, the existing resources are not enough to meet the needs of life.

The concept of scarcity is defined as a situation where the number of means of satisfying needs is less than the number of needs for these means of satisfaction. This situation encourages people to make choices among the most profitable alternatives. In addition, humans must be wise and rational in allocating economic resources. To produce various goods and services as a means of satisfying needs various resources are needed. Some of these resources are Natural Resources, Human Resources and Capital Resources.

2.2 Economic Theory (Demand and Supply)

Supply comes from the manufacturer. Supply is several goods or services offered by sellers at various price levels and within a certain time, for example per day, per month, and per year. The quantity of the commodity to be sold by the seller is called the quantity supplied which is a continuous flow per unit time. The amount offered can be different from the amount sold. It is possible that the amount offered is greater than the amount sold.

The law of supply is "the higher the price of an item, the greater the quantity of that item will be offered by sellers. Conversely, the lower the price of an item, the smaller the quantity of that item supplied. From the law of

supply above, we can describe the supply curve as a curve that shows the relationship between the price of a particular good and the quantity of that item supplied.

The concept of demand is a very important study material in economics. In economics, demand is the amount of product that consumers want and can buy at various price levels in a certain period by assuming the factors that influence it are constant or fixed. While the demand function is a function that shows the condition of demand for goods demanded by consumers for goods produced by producers. In the law of demand, the size of the quantity demanded for an item depends heavily on the price level of the item, if other conditions are considered constant (*ceteris paribus*), such as for consumer tastes, the ratio of other goods, consumer income and so on, then assuming that the level of people's income is considered fixed, while on the other hand the price of goods rises, this will of course cause a decrease in the number of requests for goods (Andi Supangat, 2006: 128).

2.3 Fuel Oil

Fuel oil is a type of fuel (fuel) produced from refining (refining) crude oil (crude oil). Crude oil from the bowels of the earth is processed in refineries first to produce oil products, which include fuel. Apart from producing fuel, crude oil refineries produce various other products, ranging from gas to products such as naphtha, light sulfur wax residue (LSWR) and asphalt. The use of fuel will continue to increase in line with Indonesia's national economic growth (Daryanto, 2007) and will decrease from time to time in accordance with Indonesia's national reserves/supplies unless new sources of reserves or use of new renewable energy are found.

Fuel subsidies, as can be understood from the draft RAPBN and Financial Notes every year, are "payments made by the Government of Indonesia to Pertamina in a situation where Pertamina's income from the task of providing fuel in the country is lower than the costs it incurs to provide the fuel. In this case a positive value, as has often been experienced, the figure is called Net Oil Profit.

Subsidized fuel prices in Indonesia are the same price set by the government and apply equally in all regions of Indonesia. Basically, the government together with the DPR determines the price of fuel after considering the basic costs of providing fuel provided by Pertamina/other Business Entities and the level of ability (willingness to pay) of the community. The types of fuel that are generally used in Indonesia are Avgas, Avtur, Premium gasoline (RON 88), Pertalite, Pertamax (RON 92) and Permax Plus (RON 95), kerosene, diesel oil (HSD), diesel oil (MDF), Fuel Oil, Biodiesel, and Pertamax DEX.

3. Methodology

This study uses a qualitative method. Data collection was carried out by means of observation and interviews with research informants. Sampling using purposive sampling method. The research sample consisted of the

operational manager of the Rafti Indah gas station, and 5 informants who represented some sectors of the economy that use subsidized fuel, including servants, motorbike users, business owners and housewives.

Data analysis techniques in the form of data reduction, data presentation to draw conclusions. The author describes this writing in a descriptive way (describing) which can be interpreted as a problem-solving procedure that is surrounded by describing or describing the current situation or subject or object of research (a person, institution, community, etc.) based on visible facts or as it is.

4. Result and Discussion

4.1 Fuel Scarcity Factors

a) Delay in Fuel Supply

Nunukan District has three gas stations, one of which is a gas station managed by PT Rafti Indah. Based on the author's observation, the Rafti Indah gas station is often closed due to a lack of fuel supply. One of the causes of the scarcity of fuel supply was due to delays in the supply of fuel caused by problems on the SPOB (Self-Propelled Oil Barger) ship carrying oil cargo. The delay can be caused by damage to the fuel carrier vessel.

b) Misuse of Subsidized Fuel

The second factor that often occurs is the misuse of subsidized fuel which should only be for the lower middle class but used by the upper middle class.

c) Behavior of Retailers

The third factor found by researchers is the misuse or sale of illegal fuel. Many people who buy subsidized fuel use jerry cans for resale (retail). It is very easy to find retail sales of subsidized fuel along the roads in Nunukan sub-district. They are willing to go back and forth in line and then resell it at a higher price. These retail sales can reap profits by increasing prices by up to 20%. The activity of reselling fuel (retail) should not be allowed by the local government because based on the law, reselling subsidized fuel violates Presidential Regulation No. 15 of 2012 regarding Retail Selling Prices and Consumers Using Certain Types of Fuel.

d) Quota Determination

Scarcity occurs when demand is greater than supply. The demand here means the consumer of the fuel itself, while the supply is the fuel quota prepared by PT Rafti Indah at the Nunukan Regency General Fuel Filling Station. Scarcity or vacancies will not occur if the supply is greater than the demand. The demand is inseparable from the large number of consumers who use Premium Materials, in this case, users of motorized vehicles, both 2-wheeled motorized vehicles and 4-wheeled motorized

vehicles. The following table shows the number of motorized vehicles in Nunukan Regency from 2019 to 2021.

Table 1 shows an increase in the number of both two-wheeled and four-wheeled vehicles from year to year. The increase in the number of motorized vehicles automatically increases the demand for Oil Materials as well. But the obstacle is that the fuel oil quota has not increased, only 81,000 liters per month.

Table 1. Number of vehicles in Nunukan

No	Type Vehicle	Year		
		2019	2020	2021
1	Car Passenger	2.677	2.776	2.967
2	Bus	25	27	30
3	Trucks	2.272	2.405	2.617
4	Bikes Motor	60.551	62.919	66.227
	Amount	65.525	68.127	71.841

4.2 Impact of Fuel Scarcity

Fuel shortages only occur in Peralite and Biosolar fuels, which are subsidized fuels. The scarcity of these two types of fuel has a negative impact on the people's economy. Apart from disrupting transportation needs, it also triggers long queues which can have an impact on road congestion. Fuel scarcity also affects businesses in every sector of the economy.

The following is the impact on the economic sectors in Nunukan District:

1. The agricultural, textile and industrial sectors are not affected by fuel scarcity because they use non-subsidized fuels, namely Dextrite and Pertamina, except for small-scale agriculture which can use Peralite and Biosolar.
2. The SME sector (Small and Medium Enterprises) is not affected by the fuel shortage because it has a letter of recommendation from the Trade Office that can help SMEs deal with incidents like this.
3. In the fisheries sector, relatively less impact is felt because fishermen have access to floating gas stations specifically for ships and boats. The Fisherman's Certificate also gives leeway to fishermen regarding the amount of fuel purchased so they can prepare themselves during a fuel shortage.
4. The household sector is affected by the scarcity of subsidized fuel. The limited subsidized fuel, which is crucial in economic activities for the lower middle-class households, will have an impact on reducing the role of the household sector as consumers and providers of services and products.

5. Conclusion

Referring to the results of the author's research, the scarcity that occurred was caused by several factors including delays in the supply of fuel, abuse of subsidized fuel, behavior of retail traders, and setting quotas.

As a result of these factors, the scarcity of fuel has an impact on the agricultural sector, SMEs (small and medium enterprises), the fisheries sector, and the household sector. Based on this research, the authors suggest to the government to take strict action against retail traders, and to gas stations to ensure timely fuel purchases so as not to cause delays in the supply of fuel.

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