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Original Article

Analysis of Income and Feasibility of Refill Drinking Water Depot Business in North Tatura Sub-District, Palu City

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Abstract

This research aims to analyze the income level and business feasibility of refillable drinking water depots in Tatura Utara Subdistrict, Palu City. A descriptive approach was applied, with data collected through interviews, questionnaires, and documentation involving five business units that have been operating for at least three years. The results show that the average monthly production cost is IDR 5,088,794, while the average monthly revenue reaches IDR 11,030,000, resulting in an average net income of IDR 5,941,205 per business unit. The R/C ratio obtained is 2.16, indicating that everyone rupiah spent generates IDR 2.16 in revenue, which reflects high economic efficiency. In addition, the average Break Even Point is 282 gallons per month, demonstrating that all business units have surpassed the break-even threshold. These findings conclude that refillable drinking water depots in the area offer a viable and sustainable business opportunity in urban environments.

Keywords: Business Income, Economic Feasibility, Refill Drinking Water Depot, R/C Ratio, Break Even Point.

1. Introduction

Drinking water is a basic need that cannot be separated from human life. As a main component in the body, water plays an important role in maintaining health, regulating body temperature, dissolving nutrients, and supporting metabolic and excretion processes. The availability of safe and consumable drinking water is an important factor in ensuring community quality of life. Based on research the human body consists of 60 to 70 percent water (McDowell, 2010). Therefore, adequate and quality water consumption is needed to maintain optimal body function. For adults, daily water intake requirements range around 2,200 grams, depending on individual body weight and daily activities.

As public awareness of the importance of healthy lifestyles increases, attention to drinking water quality has also grown (Benameur et al., 2022; Seelen et al., 2019). In household environments, demand for hygienic, safe, and practical drinking water has caused changes in consumption behavior. While people previously tended to boil water for drinking purposes, many families now switch to using refillable gallon water served through dispensers. This change is driven by reasons of time efficiency, ease of use, and relatively affordable prices.

This consumption pattern change has also encouraged the emergence of new business opportunities, especially in serving drinking water through DAMIU (Depot Air Minum Isi Ulang - Refillable Drinking Water Depot) business units (Rosita, 2014). Refillable Drinking Water Depot (hereinafter referred to as DAMIU) is a form of business that processes raw water

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into ready-to-consume water through certain filtration systems, which is then distributed to consumers in refill form (Mila et al., 2020). Edwar & Ariefando (2019) classify DAMIU as part of the micro to medium business sector that plays a role in meeting community clean water needs and creating new employment opportunities. DAMIU development is very rapid, especially in urban areas and dense settlements because it can provide good quality drinking water at more affordable prices compared to branded bottled water.

Besides being practical and economical, refillable drinking water depots are also considered more environmentally friendly because they can reduce the use of single-use plastic bottles and gallons. This sustainability factor becomes added value for DAMIU businesses, especially amid increasing awareness of environmental issues (Khoeriyah & Anies, 2015; Zarifah et al., 2022). Although requiring relatively large initial investment for equipment procurement such as filtration, ultraviolet sterilization, and sanitation facilities, this business remains attractive due to profit potential and continuously growing demand. DAMIU is one of the most in-demand types of businesses in urban areas due to high demand and stable profit margins (Joenoes et al., 2024).

DAMIU development in Palu City is quite significant. Based on 2024 data, there are 317 DAMIU businesses spread across various areas. This number shows that this business is increasingly in demand by the community, while becoming part of the clean water security strategy at the local level. The Palu City Government also plays a role in supervision and control through the issuance of Palu Mayor Regulation Number 44 of 2023, which aims to ensure that drinking water produced meets safety, sanitation, and public health standards.

One area experiencing rapid DAMIU business growth is North Tatura Village. Its strategic location in the city center and close to traditional markets, offices, and dense residential settlements makes this area have high demand for drinking water. With a population of around 9,729 people, the need for clean, cheap, and easily accessible drinking water becomes increasingly important. Additionally, economic activities in this area are quite active with the presence of several micro and small business operators, including 25 business units in the food and beverage sector that certainly require regular quality water supply. Under these conditions, the presence of DAMIU becomes an important solution for meeting household and small business drinking water needs.

However, despite having promising potential and prospects, the sustainability of DAMIU businesses still depends on various factors, both internal and external. Aspects such as business income, operational cost efficiency, raw water availability, and compliance with sanitation and health standards become important factors determining the feasibility and sustainability of this business. Amid increasing competition among business operators and market demand dynamics, systematic economic analysis becomes key to determining the extent to which DAMIU businesses in this area can survive and develop.

Based on this background, this research aims to analyze the income level obtained from DAMIU businesses in North Tatura Village, Palu City and evaluate the feasibility of these businesses based on various economic indicators, namely Revenue Cost (R/C Ratio) and Break Even Point (BEP). With this approach, it is hoped that an objective picture can be obtained regarding business efficiency and its development prospects in the future. The results of this research are not only beneficial for business operators in making managerial decisions, but also relevant as a reference for potential investors and local governments in formulating MSME development strategies based on community basic needs.

2. Literature Review

2.1. Income

Income is one of the indicators in measuring business performance, especially in the scope of microeconomics and business management. Generally, income reflects how effectively business units convert production inputs into economically valuable outputs. Operationally, income not only shows cash inflows, but also functions as an indicator of efficiency, long-term business resilience, and potential for expansion and future growth (Hady, 2017).

According to Pelipa & Astikawati (2021), business income can be defined as the difference between total revenue obtained from sales activities and total costs incurred in the production process. Net income is often used as a reference to assess whether a business experiences profit or loss. If net income values continue to increase consistently, this reflects opportunities for the business to survive and compete competitively in the market.

Several factors affecting income magnitude include sales volume, pricing policies, cost efficiency, and market response to products or services offered. Efficiency in operations and distribution management greatly affects income performance, especially for MSMEs (Dewi, 2018). Businesses that can manage costs carefully and optimize marketing strategies tend to show good income stability.

However, high income does not guarantee success if not balanced by healthy financial management. Therefore, it is important for business operators to understand income not only as a nominal value, but in relation to cost structure, production models, and long-term growth strategies. In dynamic business environments, business operators need to conduct regular monitoring of income trends as a basis for decision-making, both for expansion and business activity restructuring.

Thus, income reflects a business's ability to utilize resources optimally, respond to market dynamics, and strengthen business position amid competition. Income analysis provides deep understanding of the direction and prospects of business sustainability in the future.

2.2. Business Feasibility

Business feasibility is an assessment process aimed at determining whether a business activity has the potential to be run efficiently, sustainably, and profitably under existing market conditions. This feasibility study covers various important aspects, such as economic, technical, legal, managerial, and social, which become the basis for consideration in making decisions to start, maintain, or develop a business. Feasibility assessment aims not only to know profit potential, but also to identify potential risks that business operators might face.

In the MSME scope, feasibility analysis is very important because it can provide a comprehensive picture of operational efficiency, ability to maintain income stability, and readiness in facing dynamic market challenges. Financially feasible businesses are characterized by efficient resource use, added value in production processes, and ability to maintain operations even in fluctuating economic situations (Pelipa & Astikawati, 2021).

One indicator that can be used to measure business financial feasibility is Revenue Cost Ratio, which is the comparison between total revenue and total costs. A business is declared economically feasible if the R/C Ratio is more than 1, meaning every one unit of cost incurred can generate greater revenue. Thus, R/C Ratio becomes a very relevant tool for measuring business efficiency and profitability, especially in assessing the rationality of resource allocation.

Pelipa and Astikawati (2021) explain that feasibility studies become effective prediction tools for designing strategic planning, including risk management and profit optimization. By conducting this study thoroughly, business operators can develop business scenarios that match the capacity and characteristics of the market they face. Feasibility evaluation also becomes key in preventing future business failures because it helps detect weaknesses before business activity implementation.

In this context, it is also important to consider Break Even Point analysis, which is the break-even point where total revenue equals total costs. BEP provides a picture of the minimum sales volume that must be achieved so the business does not experience losses. The lower the BEP point, the faster the business can cover operational costs and start earning profits, making it one of the important indicators in risk analysis and short-term business planning. Not only limited to financial aspects, business feasibility is also determined by technical factors such as equipment quality, technology efficiency, and production infrastructure readiness. Business success is also determined by the extent to which business management and organizational systems can adapt to market changes and government regulations (Rajaseharan & Rakshana, 2020). Additionally, legal aspects such as licensing, compliance with health standards, and legal business protection.

Business feasibility is also closely related to marketing strategies and business position in the market. Businesses that have good distribution systems, competitive prices, and effective promotional strategies will have high sustainability opportunities. In today's digital era, online aspects also become very relevant feasibility factors (Soegoto & Utomo, 2019). By understanding and applying business feasibility principles, business practitioners can set realistic goals, strengthen competitive positions, and maintain long-term operational continuity. Therefore, feasibility studies are not only conducted at the initial stage of business establishment, but also need to be evaluated regularly as part of strategic and dynamic management processes.

2.3. Refillable Drinking Water Depot Business

DAMIU is one form of micro business engaged in providing consumable water through certain filtration and processing processes. DAMIU serves as a solution for clean water supply that is more economical compared to branded bottled water. This business is in high demand due to relatively low initial capital and high market demand. Technically, the water processing process at DAMIU involves several important stages to ensure the quality of water produced (Setiawan et al., 2024), including:

1) Mechanical filtration: one of the initial stages in the water processing process aimed at filtering large particles, such as sand, gravel, mud, or other solid materials contained in raw water. This process uses physical filtering media, such as quartz sand, gravel, or filters, to remove coarse dirt before water enters finer filtration stages.
2) Activated carbon filtration: one of the important stages in the water processing process aimed at removing odors, tastes, and certain chemicals that can affect water quality. The main medium used in this stage is activated carbon, which is known to have very small pores and large surface area, making it effective in absorbing various pollutants.
3) Reverse osmosis (RO): a water purification method using semipermeable membranes to separate dissolved substances, such as salts, minerals, and other contaminants, producing pure water. This technology is very commonly used in refillable drinking water depots due to its ability to produce high-quality water that is safe for consumption.
4) Ultraviolet (UV) sterilization: one of the important stages in processing harmful microorganisms such as bacteria, viruses, and protozoa. This process uses ultraviolet rays with certain wavelengths to damage the Deoxyribonucleic Acid (DNA) or

Ribonucleic Acid (RNA) of microorganisms, so they cannot reproduce or cause infection (Kodoatie & Sjarief, 2010).

The use of this technology supports DAMIU feasibility from the technical side because it ensures product quality that meets health standards. By understanding this process, business operators can increase consumer confidence and competitiveness in increasingly competitive markets.

3. Methods

This research is descriptive research. The data used consists of primary data and secondary data. Primary data was obtained through interviews with questionnaire distribution to DAMIU business operators, while secondary data was obtained from related agencies. The sampling technique uses Purposive Sampling method, which is by selecting respondents who have DAMIU businesses and have been operating for at least three years.

Data analysis method was conducted by calculating business income levels based on the difference between total revenue and total operational costs. Additionally, business feasibility was analyzed using R/C Ratio and BEP methods. R/C Ratio is used to assess cost usage efficiency in generating revenue, while BEP is used to determine at what sales volume point the business is in break-even condition, where total revenue equals total costs. The formulas used in this analysis are as follows:

To calculate total cost using the following formula:

$$\mathbf{TC = FC + VC}$$

Where:
TC = Total Cost
FC = Total Fixed Cost
VC = Total Variable Cost

To calculate total revenue using the following formula:

$$\mathbf{TR = P \times Q}$$

Where:
TR = Total Revenue
P = Product Price
Q = Production quantity

To calculate income using the following formula:

$$\boldsymbol{\pi = TR - TC}$$

Where:
π = Business income
TR = Total Revenue
TC = Total Cost

To calculate R/C Ratio using the following formula:

$$\boldsymbol{R/C\ Ratio} = \frac{\textbf{Total Revenue (TR)}}{\textbf{Total Cost (TC)}}$$

Where:
R/C = Business feasibility
π = Business income
TC = Total Cost

Feasibility Criteria Assessment:
R/C > 1: DAMIU business is feasible to continue
R/C < 1: DAMIU business is not feasible to continue
R/C = 1: DAMIU business is feasible at break-even point

To calculate BEP using the following formula:

$$BEP = \frac{\textbf{Total Fixed Cost (FC)}}{\textbf{Price per Unit} - \textbf{Variable Cost (VC)}}$$

Where:
FC = Total Fixed Cost
VC = Total Variable Cost
Price per unit = Product selling price per gallon
BEP unit = Minimum number of gallons that must be sold

4. Results and Discussion

4.1. Research Results

4.1.1. Respondent Identity

Respondent identity provides a description of DAMIU business operator profiles in North Tatura Village. Based on Table 1, respondents are aged between 27 to 60 years with educational backgrounds from junior high school to bachelor's degree. Business experience ranges from 5 to 15 years. This shows that most business operators are in productive age and have sufficient experience in running their businesses.

Table 1. Respondent Identity

Business Name	Respondent Age (years)	Latest Education	Business Experience (years)
Depot Fazza	29	High School	5
Depot Airro	36	Bachelor's	6
Depot UD Rizky	60	Junior High	9
Depot An-Nur	29	High School	12
Depot Anugrah	27	High School	15

Source: Processed from primary data (2025)

4.1.2. Fixed Cost, Variable Cost and Total Cost Calculation Results

Cost is an important component in business analysis. Table 2 shows that each business unit has different fixed and variable costs. The largest total cost is at Depot Anugrah amounting to Rp9,601,354, while the smallest is at Depot An-Nur amounting to Rp3,157,336. Overall, the total cost of the five business units is Rp25,443,974. This shows that cost structure differences are influenced by operational scale and production needs intensity.

Table 2. Fixed Cost, Variable Cost and Total Cost Calculation Results

Business Name	Fixed Cost (Rp)	Variable Cost (Rp)	Total Cost (Rp)
Depot Fazza	719,328	2,536,000	3,255,328
Depot Airro	1,592,668	3,142,000	4,734,668
Depot UD Rizky	935,288	3,760,000	4,695,288
Depot An-Nur	645,336	2,512,000	3,157,336
Depot Anugrah	1,463,354	8,138,000	9,601,354
Total	**5,355,974**	**20,088,000**	**25,443,974**

Source: Processed from primary data (2025)

4.1.3. Revenue and Income Calculation Results

Business income is calculated from the difference between total revenue and total costs. Table 3 shows that all business units obtain positive income. The highest income is achieved by Depot Anugrah amounting to Rp11,098,646, and the lowest is Depot An-Nur amounting to Rp5,941,205. All business units show positive net income, which confirms the profitability of DAMIU businesses in that area.

Table 3. Revenue and Income Calculation Results

Business Name	Revenue TR=P.Q (Rp)	Total Cost TC=FC+VC (Rp)	Income π=TR-TC (Rp)
Depot Fazza	7,650,000	3,255,328	4,394,672
Depot Airro	9,900,000	4,734,668	5,165,332
Depot UD Rizky	10,500,000	4,695,288	5,804,712
Depot An-Nur	6,400,000	3,157,336	3,242,664
Depot Anugrah	20,700,000	9,601,354	11,098,646
Total	**55,150,000**	**25,443,974**	**29,706,026**
Average	**11,030,000**	**5,088,794**	**5,941,205**

Source: Processed from primary data (2025)

4.1.4. R/C Ratio Calculation Results

A business can be considered economically feasible if the R/C Ratio value > 1, indicating that business revenue is greater than operational costs. Based on Table 4, all business units have R/C Ratio values above 2, with an average of 2.16. This means every expenditure of Rp1 generates revenue of Rp2.16. High R/C Ratio values indicate cost efficiency and distribution strategy effectiveness in each business unit.

Table 4. R/C Ratio Calculation Results

Business Name	Revenue TR=P.Q (Rp)	Total Cost TC=FC+VC (Rp)	R/C Ratio RC=TR/TC
Depot Fazza	7,650,000	3,255,328	2.34
Depot Airro	9,900,000	4,734,668	2.09
Depot UD Rizky	10,500,000	4,695,288	2.23
Depot An-Nur	6,400,000	3,157,336	2.02
Depot Anugrah	20,700,000	9,601,354	2.15
Total	**55,150,000**	**25,443,974**	**10.83**
Average	**11,030,000**	**5,941,205**	**2.16**

Source: Processed from primary data (2025)

4.1.5. Break Even Point Calculation Results

BEP shows the minimum number of products that must be sold so the business does not experience losses. Table 5 shows that the average BEP of five business units is 282 gallons, or Rp1,669,529 per month when converted to rupiah. This reflects operational efficiency and production capacity that can exceed the break-even point significantly.

Table 5. Break Even Point Calculation Results

Business Name	FC (Rp)	P (Rp)	AVC VC=VC/Q (Rp)	BEP BEP=FC/P-AVC	BEP (Rp)
Depot Fazza	719,328	5,667	1,878	190	1,076,730
Depot Airro	1,592,668	6,600	2,095	354	2,336,400
Depot UD Rizky	935,288	5,833	2,089	250	1,458,250
Depot An-Nur	645,336	5,333	2,093	199	1,061,267
Depot Anugrah	1,463,354	5,750	2,260	420	2,415,000
Total	**5,355,974**	**29,183**	**10,415**	**1,413**	**8,347,647**
Average	**1,071,194**	**5,836**	**2,083**	**282**	**1,669,529**

Source: Processed from primary data (2025)

4.2. Discussion

4.2.1. General Overview of Research Location

North Tatura Village is one of the villages located in South Palu District, Palu City. Geographically and demographically, this village has an area of 201.08 km² with an altitude of 30 meters above sea level. Its population reaches 9,729 people, consisting of 4,762 males and 4,967 females, with 2,648 households. This village has quite dynamic economic activities, including in the field of refillable drinking water supply, which has become one of the alternatives for clean water provision for the community.

Based on research results, out of a total of 9 DAMIU business units in North Tatura Village, only 5 units were willing to become respondents and provide complete data. Several field constraints faced include the busy operational hours of business operators, lack of interest in participating in research activities, and researchers' difficulties in accessing locations and meeting business owners directly. Nevertheless, the five participating respondents are considered to have represented the diversity of business conditions in the area. Thus, the results obtained remain relevant to be used as a basis for analyzing income, production costs, and DAMIU business feasibility in North Tatura Village in general.

4.2.2. Business Income Analysis

Income is an important indicator in measuring the financial performance of a business unit, obtained from the difference between total revenue and total costs in a certain period. In DAMIU business, revenue comes from gallon sales through two main service forms, namely direct sales at business locations and delivery services to consumers' homes or business places. Price variations applied, where delivery services tend to be higher because they consider additional costs such as fuel and labor, also affect the magnitude of business revenue. Therefore, income magnitude is greatly influenced by distribution strategies, sales volume, and operational cost efficiency implemented by each business unit.

Research results show that the average monthly net income of five business units in North Tatura Village is Rp5,941,205. The highest income is achieved by Depot Anugrah amounting to Rp11,098,646, caused by high production volume reaching 3,600 gallons per month and delivery service dominance of 75 percent. This shows that active distribution strategies can significantly increase business revenue. Conversely, Depot An-Nur has the lowest income of Rp3,242,664 due to limited capacity and labor constraints, so service coverage is not optimal.

Depot UD Rizky and Depot Airro respectively obtain income of Rp5,804,712 and Rp5,165,332, with stable production and combined distribution strategies between direct sales and delivery services. Meanwhile, Depot Fazza records income of Rp4,394,672, from production of 1,350 gallons per month. Despite relying on only one worker, this depot still shows good income performance due to its strategic location near traditional markets.

When compared with income classification according to the Central Statistics Agency (BPS), all business units are in the lower-middle to upper-middle income categories, with the following ranges (BPS, 2021):

a. Low income: below Rp2,000,000 per month
b. Lower-middle income: Rp2,000,000 – Rp4,999,999 per month
c. Upper-middle income: Rp5,000,000 – Rp10,000,000 per month
d. High income: above Rp10,000,000 per month

Based on income classification from the Central Statistics Agency (BPS, 2021), all researched business units fall into the categories of lower-middle to upper-middle income.

Only Depot Anugrah falls into the high-income category. This indicates that DAMIU businesses are not only profitable, but also capable of becoming stable and sustainable livelihood sources for local business operators.

4.2.3. R/C Ratio Analysis

R/C Ratio is a financial analysis tool to assess business efficiency, calculated by comparing total revenue with total operational costs. This ratio value describes the return rate from each cost unit spent. If the R/C Ratio value is greater than 1, then the business is considered economically feasible because it generates income exceeding expenditure.

This research results show that the average R/C Ratio of five DAMIU business units in North Tatura Village is 2.16, meaning every Rp1 of operational costs can generate revenue of Rp2.16. This figure reflects high efficiency, achieved through optimal management of fixed and variable cost structures.

Cost structures among depots are quite diverse, depending on production capacity, technology, and distribution systems. Total overall costs amount to Rp25,443,974, consisting of fixed costs of Rp5,355,974 (about 21 percent) and variable costs of Rp20,088,000 (about 79 percent). Fixed costs include equipment depreciation such as RO machines and operational vehicles, while variable costs include electricity, fuel, filters, and labor wages.

Individual R/C Ratio performance details show diversity in efficiency strategies. Depot Fazza records the highest R/C Ratio of 2.32, with the lowest production cost of Rp3,255,328 and revenue of Rp7,650,000. This success is due to economic cost management and minimal use of expensive fixed resources. Depot Fazza focuses on direct sales systems without much use of distribution vehicles, thus reducing expenses.

Conversely, Depot Anugrah has the highest total cost of Rp9,601,354, but still records an R/C Ratio of 2.15 because it can obtain revenue of Rp20,700,000. This shows that despite large costs, this depot successfully maximizes production volume up to 3,600 gallons per month and has an extensive distribution fleet. This means large-scale businesses can still be efficient if revenue is proportional to or exceeds expenditure.

Depot UD Rizky and Depot Airro respectively show R/C Ratio values of 2.23 and 2.09. Both depots have moderate cost structures and can achieve balance between expenditure and sales volume. For example, Depot UD Rizky spends Rp4,695,288 and obtains Rp10,500,000 revenue, meaning cost management per production unit is done optimally without sacrificing quality or service capacity.

Meanwhile, Depot An-Nur records the lowest R/C Ratio of 2.02, but still remains in the feasible category. Its small production cost of Rp3,157,336 is balanced with not too high production volume of 1,200 gallons per month, generating revenue of Rp6,400,000. This shows that small-scale businesses can still survive financially as long as expenditure is kept efficient.

Overall, R/C Ratio values > 1 achieved by all depots result from a combination of stable revenue with controlled operational costs, both for small and medium-scale businesses. Cost efficiency approaches appear very determining, because:

a. Proportional fixed costs facilitate entrepreneurs in adjusting production capacity to market demand
b. Flexible variable costs allow operational adjustments in facing fuel fluctuations, labor wages, and daily needs
c. High revenue, especially from delivery services, provides competitive advantages for depots with active distribution fleets

With cumulative total revenue of all businesses amounting to Rp55,150,000 and total costs of only Rp25,443,974, mathematically:

$$\frac{R}{C} Ratio = \frac{\text{Total Revenue (TR)}}{\text{Total COst (TC)}} = \frac{55.150.000}{25.443.974} = 2{,}16$$

This result aligns with research conducted by Dyah Ayu Puspita (2020) in Mulyorejo District, Surabaya City, where the average R/C Ratio was 2.13. Meanwhile, DAMIU in North Tatura Village recorded 2.16, showing a higher figure, thus further confirming that these businesses are efficient and profitable.

4.2.4. Break Even Point (BEP)

BEP or break-even point is a condition where total revenue equals total costs, so the business experiences neither profit nor loss. According to Soekartawi (1995), BEP is calculated to determine minimum sales volume so the business can cover all production costs incurred. This aligns with Mulyadi's (2001) opinion, stating that BEP is an analysis used to determine sales levels that must be achieved so the business does not experience losses, where revenue equals costs incurred.

Based on research results, BEP values in gallon units for DAMIU businesses in North Tatura Village show quite significant variation, ranging from 190 to 450 gallons per month. Meanwhile, when converted to rupiah, BEP values are in the range of Rp1,061,267 to Rp2,415,000 per month. This difference shows that business scale levels, fixed cost magnitude, and operational management efficiency of each depot have direct influence on the break-even point magnitude that must be achieved.

Individually, Depot Fazza has the lowest BEP value of 190 gallons per month. This means the business will be in break-even position if it successfully sells at least 190 gallons of refill water. With an average selling price of Rp5,667 per gallon, the minimum revenue that must be achieved to cover all costs is Rp1,076,730 per month. This value is relatively small compared to this depot's actual production volume reaching 1,350 gallons, meaning the business has exceeded the break-even point significantly.

Depot An-Nur has a BEP of 199 gallons, equivalent to revenue value of Rp1,061,267 per month, assuming an average selling price of Rp5,333 per gallon. This depot also shows feasible performance because its monthly production volume reaches 1,200 gallons. Depot UD Rizky requires at least 250 gallons to reach break-even point, equivalent to revenue of Rp1,458,250 per month at a selling price of Rp5,833 per gallon. With actual sales realization of 1,800 gallons, this depot has also far exceeded the break-even point.

Meanwhile, Depot Airro has a BEP of 354 gallons, with minimum revenue of Rp2,336,400. The selling price per gallon is quite high at Rp6,600 per gallon, making the BEP value in rupiah large. Nevertheless, with actual production of 1,500 gallons per month, this depot remains in feasible condition. Finally, Depot Anugrah has the highest BEP value among all depots, namely 420 gallons, with minimum revenue value of Rp2,415,000. Despite having a large BEP figure, this depot can sell up to 3,600 gallons per month, so it still generates large profits each month.

5. Conclusion

Based on research results conducted on five DAMIU business units in North Tatura Village, it can be concluded that this business is classified as feasible and financially profitable. The average net income obtained by business operators is Rp5,941,205 per month, with income variation between Rp3,242,664 to Rp11,098,646, which is influenced by production capacity, distribution strategies, and efficiency in managing fixed and variable costs. In terms of business efficiency, all depots show R/C Ratio values above 2, with an average of 2.16, indicating that every expenditure of Rp1 can generate revenue of Rp2.16, thus demonstrating high business efficiency levels and the ability to create profits. Additionally, all business units have exceeded the break-even point, with BEP values in gallon units ranging from 190 to 420 gallons per month, and when converted to rupiah form, ranging from Rp1,061,267 to Rp2,415,000.

The results of this research prove that DAMIU businesses have promising prospects and are feasible to be developed as sustainable business alternatives in urban areas like North Tatura. However, the increasing number of similar business operators in this area can create increasingly fierce competition. Therefore, business operators are advised to continuously innovate, improve service quality, and implement effective and adaptive marketing strategies. For depots with relatively high operational costs, efficiency efforts such as reducing raw material waste and energy conservation are very necessary to maintain profit margins. Meanwhile, for depots with low income, market expansion through promotion, discount offerings, and service quality improvement become appropriate strategies. The utilization of digital technology, including the use of social media and online marketing platforms, can also be maximized to reach broader consumers and strengthen business competitiveness amid continuously evolving market dynamics.

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