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**EFFECTIVENESS OF MILKFISH FINGERLING GRANTS AND FEEDS
FOR BENEFICIARY FARMERS IN TABUNGANEN SUBDISTRICT OF
BARITO KUALA REGENCY, SOUTH KALIMANTAN, INDONESIA**

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ABSTRACT

One of the main objectives of the milkfish fingerling grant program is to enhance the productivity and quality of milkfish aquaculture yields. High-quality milkfish fingerlings and efficient feed assistance are provided. The research aims to analyze the effectiveness of milkfish fingerling grants and feed for the beneficiaries in Tabunganen Subdistrict, Barito Kuala Regency. The research site was purposively selected in Tabunganen Subdistrict based on its designation as a recipient of the milkfish fingerling grant program, as indicated in the letter issued by the Department of Marine and Fisheries of South Kalimantan Province with reference number 523.5/0156-BP/Dislutkan. The data analysis technique involved measuring the effectiveness of milkfish fingerling grants and feed using a scoring method among 34 respondents comprising three groups of milkfish farmers. The effectiveness of milkfish fingerling grants and feed for the beneficiaries in Tabunganen Subdistrict, Barito Kuala Regency, was found to be on average 91.64% (effective), indicating that the milkfish fingerling grants and feed in Barito Kuala Regency, South Kalimantan Province, are effective.

KEY WORDS

Milkfish, effectiveness, grant, Barito Kuala.

Indonesian government has recognized the significant potential of milkfish aquaculture and has launched various support programs, training initiatives, and technical assistance for milkfish farmers. The aim is to enhance productivity and the quality of aquaculture yields while increasing the income of fish farmers (Suriadi et al., 2019). Continuous efforts are also being made to develop more efficient and sustainable aquaculture technologies and practices in milkfish farming. These innovations aim to improve harvest yields, reduce disease risks, and optimize resource utilization (Hanifah et al., 2017).

The government-provided grants encompass various types of assistance, including high-quality milkfish fingerlings and good-quality feeds. One of the main objectives of the milkfish grant program is to enhance productivity and the quality of milkfish aquaculture yields. These programs also aim to improve the welfare of coastal communities, which often rely on the fisheries sector. The assistance provided to milkfish farmers by the government is expected to increase income levels and living standards (Aritonang, 2014). Furthermore, grant programs prioritize sustainable and environmentally friendly farming practices, crucial for maintaining aquatic ecosystem balance and preventing adverse environmental impacts. The milkfish grant programs are vital strategies in supporting coastal fish farmers (Wirawan, 2015).

Barito Kuala Regency is located in South Kalimantan Province, Indonesia. The region of Barito Kuala holds substantial potential for coastal aquaculture, particularly for milkfish, due to its extensive access to coastal waters. The waters surrounding Barito Kuala Regency provide a favorable habitat for milkfish farming and various other marine species. Warm water temperatures and fertile environments create ideal conditions for milkfish growth. Milkfish farming holds significant economic value in Indonesia.

Milkfish is highly popular and in high demand in both domestic and international markets. With its extensive coastal areas, milkfish farming can serve as a crucial income source for local communities (Aziza et al., 2015). The potential of coastal aquaculture, including milkfish farming, has garnered attention from local and central governments.



Milkfish is one of the most popular fish species in Indonesia, valued for its economic potential in increasing farmers' income. Research findings by Jefri et al. (2022) indicate that milkfish have an R/C Ratio of 2.12 and a Payback Period of 2.43, with an economic profitability analysis of 41.07%. Its delicious taste, tender texture, and adaptability to various seasonings make milkfish a favorite in various Indonesian traditional dishes, such as milkfish presto and milkfish with spicy sauce, among others. Milkfish holds high economic value in Indonesia (Elviana, 2015).

The harvest of milkfish can yield significant income for cultivators. Milkfish cultivation holds great potential (Wulandari & Pranowo, 2018). Support programs and training initiatives have been launched to aid local farmers, including milkfish farmers, in enhancing productivity and the quality of their yields. Through the utilization of extensive coastal waters and support from various stakeholders, Barito Kuala Regency has substantial opportunities to develop coastal aquaculture, particularly in milkfish farming, as a sustainable income source contributing to the local economy (Huda et al., 2014).

Government assistance programs are governed by South Kalimantan Governor Regulation Number 069 of 2021 concerning Budgeting, Implementation and Administration, Reporting and Accountability, as well as Monitoring and Evaluation of Grants and Social Assistance derived from the Regional Revenue and Expenditure Budget (APBD). The milkfish grant program provided to communities is based on a letter issued by the Department of Marine and Fisheries of South Kalimantan Province, numbered 523.5/0156-BP/Dislutkan, regarding the proposal for aquaculture facility grants, including those directed to the Fisheries Department of Barito Kuala Regency. This letter refers to Ministry of Home Affairs Decree Number 50-5889 of 2021 concerning verification, validation and inventory, updating of classification, codification, and nomenclature of regional planning, development, and finance with sub-activities in aquaculture facilities in sea and brackish water.

The provision of high-quality milkfish fingerlings and good-quality feed through the grant program is crucial for milkfish growth. Low-quality or insufficient feed provided in the grant program can impact cultivation outcomes. Feed is a critical factor in the growth and development of milkfish. Adequate and appropriate nutrition is essential for fish to grow well, achieve desired harvest sizes, and maintain health. Feed serves as a source of energy, protein, vitamins, and minerals necessary for fish survival (Aziza et al., 2015).

The quality of feed provided to milkfish can directly impact productivity and cultivation outcomes. Poor-quality or inappropriate feed can result in slow growth, low body weight, and increased disease risks. High-quality feed can enhance growth, feed efficiency, and fish health. Besides quality, sufficient availability of feed is also crucial.

Issues arise when granted assistance is not effectively utilized, such as receiving fewer fingerlings than proposed in the application or receiving feed that does not meet milkfish requirements. These issues contribute to the ineffectiveness of grant assistance utilization among recipient groups of milkfish fingerlings and feed grants. The research aims to analyze the effectiveness of milkfish fingerling and feed grants for the beneficiaries in Tabunganen Subdistrict, Barito Kuala Regency.

MATERIALS AND METHODS OF RESEARCH

The research site was purposively selected in Tabunganen Subdistrict based on the consideration that the area is a recipient of the milkfish fingerling grant program, as indicated in the letter issued by the Department of Marine and Fisheries of South Kalimantan Province with reference number 523.5/0156-BP/Dislutkan.

The sample used in this research consists of 34 milkfish farmers divided into 3 groups who received milkfish fingerling and feed grants from 2022 to 2023.

To address the research objectives, the data analysis technique used is measuring the effectiveness of milkfish fingerling and feed grants involving 34 respondents divided into 3 groups of milkfish farmers. The effectiveness of milkfish fingerling and feed grants is assessed using a scoring method. In the questionnaire, alternative answers are provided for



each item. The criteria are as follows: 4 = Very Appropriate; 3 = Appropriate; 2 = Not Appropriate; 1 = Not Appropriate.

The formulation formula according to Muhammad (2015) is as follows:

$$\text{Percentage of achievement} = \frac{\sum \text{score realization}}{\sum \text{score target}} \times 100\%$$

Where: \sum Score realization = the total score obtained from the answers of respondents who were interviewed during the research; \sum Score target = Total score expected from the answers of respondents who were interviewed during the research.

Table 1 – Effectiveness Criteria

Effectiveness Percentage	Criteria
100 %	Very effective
90 % - <100 %	Effective
80 % - < 90 %	Effective enough
60 % - <80 %	Less effective
< 60 %	Ineffective

Source: Mahmud, 2023.

RESULTS AND DISCUSSION

The analysis of the effectiveness of milkfish fingerling and feed grants for farmers in Tabunganen Subdistrict, Barito Kuala Regency, is the main focus of this study, considering various crucial criteria. This program emphasizes important aspects such as the suitability of milkfish fingerlings and feed with the farmers' expectations and needs, adherence to administrative requirements, the type, quality, and size of milkfish fingerlings that are appropriate, adequate pond area as per expectations, and accuracy in the distribution of feed in terms of type, quality, and quantity. Additionally, it is important to consider timeliness in distribution and adaptation to each farmer's location. A detailed evaluation of these aspects will illustrate the extent to which this grant program can provide positive impacts and support the sustainability of milkfish fingerling farming. The research analysis results are presented in Table 2 as follows:

Table 2 – Effectiveness of Milkfish Nener and Feed Grants

Indicator	Target	Realization	%	Program Effectiveness
The milkfish fingerlings and feed are received according to the target.	136	136	100.00%	Very Effective
The milkfish fingerlings and feed meet the administrative requirements.	136	133	97.79%	Effective
The milkfish fingerlings are suitable in terms of type, quality, and size.	136	125	91.91%	Effective
The milkfish fingerlings are suitable in terms of pond size and farmers' expectations.	136	109	80.15%	Effective Enough
The feed received matches the expected type and quality.	136	123	90.44%	Effective
The quantity of feed received meets farmers' expectations.	136	100	73.53%	Less Effective
The milkfish fingerlings and feed are received on time.	136	135	99.26%	Effective
The milkfish fingerlings and feed are suitable for the business location.	136	136	100.00%	Very Effective
Total	1088	997	91.64%	Effective

Source: Processed primary data, 2024.

Based on the analysis from Table 2 regarding the effectiveness of milkfish fingerling and feed grants for farmers in Tabunganen Subdistrict, Barito Kuala Regency, it is evident that overall, the program has successfully achieved most of its set targets. The first indicator, that milkfish fingerlings and feed were received as intended/targeted, shows a 100% achievement, indicating that the assistance was highly effective in reaching the target recipients, specifically groups of milkfish farmers who submitted proposals in Tabunganen Subdistrict, Barito Kuala Regency.

The second indicator, milkfish fingerlings and feed received in accordance with administrative requirements, achieved 97.79%. This signifies effective compliance with administrative conditions, where recipients were farmers registered under the KUSUKA card system and were not civil servants or village officials, but rather involved in milkfish farming



activities. The third indicator, milkfish fingerlings received matching their type, quality, and size, achieved 91.91%, suggesting a slight discrepancy in the type of milkfish fingerlings received. This calls for an evaluation of the selection process to ensure accuracy and alignment with the specific needs of each farming operation.

The fourth indicator, milkfish fingerlings received meeting farmers' expectations, achieved 80.15%, indicating a reasonably effective performance. Constraints in grant funding contributed to discrepancies in the quantity of fingerlings received, as the pond area for milkfish farming did not align with the required stocking densities. Improvements in estimation and location planning are necessary to match the scale of operations needed by farmers for increased production.

The fifth indicator, feed received matching the expected type and quality, achieved 90.44%, demonstrating effective provision of feed meeting farmers' expectations. The feed provided also supported natural feeding practices adopted by milkfish farmers. The sixth indicator, feed quantity meeting farmers' expectations, achieved 73.53%, classified as less effective. Insufficient feed quantities did not fully support milkfish growth until harvest, as the provided feed did not meet individual farmers' needs and lasted only until the fingerling stage. Fertile farming land naturally provides sufficient organic feed for milkfish growth until harvest.

These findings underscore the program's overall effectiveness while highlighting areas needing improvement, particularly in refining selection processes, improving budget allocation for stocking densities, and ensuring adequate feed provision to sustain milkfish farming operations effectively.

The seventh indicator, timely receipt of milkfish fingerling and feed grants according to plan, achieved 99.26%, categorized as effective. Timely provision aligned with land preparation for milkfish farming with grants for fingerlings and feed is crucial for successful farming. The eighth indicator, milkfish fingerlings and feed matching the business location, achieved 100%, categorized as highly effective. Proper location, particularly brackish ponds suitable for milkfish farming in the southern part, known as a milkfish farming center in Barito Kuala Regency, is essential. The average effectiveness of milkfish fingerling and feed grants for recipients in Tabunganen Subdistrict, Barito Kuala Regency, is 91.64% (effective).

Overall, despite the significant benefits provided to farmers by these grants, continuous evaluation of every aspect and implementation will help ensure the program remains relevant and effective in supporting the growth and sustainability of milkfish fingerling farming in Tabunganen Subdistrict. Efforts to enhance effectiveness in meeting farmers' expectations should be prioritized in refining and developing future program enhancements. Suriadi et al. (2019) demonstrated the effectiveness of government assistance programs for Poklahsar in Bondalem Village, Buleleng Regency, achieving a high effectiveness rate of 91.9%. Both studies illustrate that fisheries sector assistance programs have a significant and effective impact on improving the welfare and productivity of beneficiaries.

Mahmud (2023) studied the effectiveness of providing chest freezers to fish processing groups in Tanah Laut Regency, achieving a 94.17% effectiveness rate. Both programs show comparable results in providing significant benefits to grant recipients. This success demonstrates that effective grant program implementation can have a tangible positive impact on increasing productivity and the sustainability of farming efforts. Continuous evaluation is necessary to ensure that assistance programs provide optimal benefits to farmers and local communities.

CONCLUSION

The effectiveness of milkfish fingerling and feed grants for recipients in Tabunganen Subdistrict, Barito Kuala Regency is an average effectiveness rate of 91.64%, categorized as effective. This indicates that the grants for milkfish fingerlings and feed in Barito Kuala Regency, South Kalimantan Province, are effective.



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