



## IMPLEMENTATION OF ENVIRONMENTAL ACCOUNTING IN MICRO, SMALL, AND MEDIUM ENTERPRISES (MSMES) OF LAYER POULTRY FARMS: A CASE STUDY ON THE IMPACT OF ENVIRONMENTALLY FRIENDLY INITIATIVES ON THE PRODUCTION COST STRUCTURE

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<b>Info Article</b>	<p><b>Abstract:</b> <i>This study aims to evaluate the implementation of environmental accounting through environmentally friendly initiatives that impact the production cost structure. A qualitative descriptive approach was employed, emphasizing a deep understanding of the research object based on factual data obtained in the field. This approach is considered appropriate for examining the application of green accounting through a case study at the farm, with a focus on interpreting meaning rather than generalizing results. The data sources comprised both primary and secondary data, collected through in-depth interviews, direct observation, and document tation. The findings reveal that initiatives such as water sterilization, fly control, waste processing, and the use of energy-saving lamps contribute to increased overhead cost efficiency &amp; support productivity. However, the application of green accounting in financial reporting remains limited, as evidenced by the incomplete financial statements only income statements are prepared, without balance sheets or accompanying notes thus failing to fully reflect the principles of environmental accounting.</i></p> <p><b>Abstrak:</b> Penelitian ini bertujuan untuk mengevaluasi implementasi akuntansi lingkungan dengan melakukan inisiatif ramah lingkungan yang berdampak pada struktur biaya produksi. Pendekatan yang digunakan adalah deskriptif kualitatif, yang menitikberatkan pada pemahaman mendalam terhadap objek penelitian berdasarkan data faktual yang ditemukan di lapangan. Pendekatan ini dinilai relevan dalam mengkaji penerapan green accounting melalui studi kasus di peternakan tersebut, dengan fokus pada interpretasi makna daripada generalisasi hasil. Sumber data yang digunakan mencakup data primer dan sekunder, yang diperoleh melalui teknik pengumpulan data berupa wawancara mendalam, observasi langsung &amp; dokumentasi. Hasil penelitian menunjukkan bahwa inisiatif seperti sterilisasi air, pengendalian lalat, pengolahan limbah &amp; penggunaan lampu hemat energi mampu meningkatkan efisiensi biaya overhead &amp; mendukung produktivitas. Namun, penerapan <i>green accounting</i> dalam pelaporan keuangan masih terbatas, ditandai dengan belum lengkapnya laporan keuangan hanya disusun laporan laba rugi tanpa neraca atau catatan atas LK sehingga belum sepenuhnya mencerminkan prinsip akuntansi lingkungan.</p>
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<p><b>Keywords:</b> <i>Environmental Accounting, Layer Poultry Farm Msmes, Environmentally Friendly Initiatives, Production Cost Structure</i></p> <p><b>Kata Kunci:</b> Akuntansi Lingkungan, Umkm Peternakan Ayam Petelur, Inisiatif Ramah Lingkungan, Struktur Biaya Produksi</p>	
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## INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) in the layer poultry farming sector play a strategic role in supplying animal protein in Indonesia and supporting the rural economy. However, layer poultry farming activities also have the potential to cause negative environmental impacts, such as water and air pollution, as well as the generation of organic waste. The high level of production demands that business actors not only focus on economic aspects, but also pay attention to environmental sustainability (A. R. Sari & Hwihanus, 2023).

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in the national economy, including in the livestock sector. Small-scale layer poultry farms, for instance, contribute to the provision of animal protein for the community. Nevertheless, these production activities also pose various environmental challenges such as foul odors, chicken manure waste, and water and air pollution if not properly managed (S. P. Sari et al., 2024).

Reban Lestari Farm, a layer poultry farming MSME operating in Kolaka Regency, Southeast Sulawesi, represents a significant case in this context. The farm has demonstrated initiatives to implement environmentally friendly principles in its operations, such as recycling waste and independently managing poultry carcass disposal. These initiatives essentially reflect the early practice of green accounting or environmental accounting, namely the recognition and measurement of costs arising from environmentally impactful activities (Ward & Deegan, 2013).

Based on field observations, the implementation of environmental accounting at Reban Lestari Farm still faces several challenges. One of the main issues is the lack of comprehensive integration of environmental aspects into the financial recording system. The farm is still limited to preparing income statements without including a balance sheet and notes to the financial statements that reflect the allocation of costs related to environmental management. As a result, the actual production cost structure does not fully capture the environmental burdens and investments incurred.

The implementation of environmentally friendly initiatives in operations such as waste recycling, energy efficiency, and the utilization of closed systems for water and waste may potentially increase short-term production costs. However, in the long run, these efforts can reduce environmental burdens while simultaneously enhancing operational efficiency and business reputation (Putri, 2024). Research on business actors' understanding and awareness of the green accounting concept indicates that

most MSME players in layer poultry farming still have limited comprehension and have not yet optimized the recording and reporting of environmental costs in accordance with accounting standards (Yolanda, 2022). In fact, the implementation of environmental accounting can have a positive impact on the production cost structure, foster efficiency, and enhance the competitiveness of sustainability-oriented products (Syukri et al., 2025).

The Triple Bottom Line (TBL) concept was introduced by Hubbard (2009) in his article "Measuring Organizational Performance: Beyond the Triple Bottom Line". Hubbard (2009) emphasized that TBL is an approach to assessing organizational performance not only in terms of economic (profit) outcomes, but also in terms of environmental (planet) and social (people) aspects. These three pillars' people, planet, and profit are integrated as the foundation for sustainable business management. The implementation of these dimensions is essential in supporting a sustainable economy (Wheelen & Hunger, 2012). Thus, business sustainability is not merely about financial profit but also entails a balanced commitment to social responsibility and environmental stewardship in order to ensure long-term operational continuity and corporate reputation.

Cost accounting is a branch of accounting that aims to identify, record, measure, and analyze various cost elements involved in the production process, in order to assist management in planning and controlling costs (Hansen, D. R., & Mowen, 2015; Hansen et al., 2009). When the principles of environmental accounting are integrated into cost accounting systems, it forms an approach known as *environmental cost accounting*, which entails the calculation and allocation of environmental costs—such as waste management, emission control, or energy conservation into the total production cost (Qian et al., 2011).

In the context of MSME layer poultry farming, environmentally friendly initiatives such as the use of organic feed, the utilization of waste as fertilizer, or water and energy efficiency have the potential to alter the conventional cost structure. While some costs may increase during the initial stages of implementation, over the long term they can reduce operational expenses and improve efficiency. Therefore, accurate recording of environmental costs becomes essential in helping management assess the profitability and economic feasibility of green initiatives (Yakhou & Dorweiler, 2004). In this sense, environmental accounting within the cost accounting framework functions not only as a reporting tool but also as a managerial analysis tool that

supports strategic and sustainable decision-making. This integration is highly relevant to advancing green economic transformation at the MSME level, which has long been underserved by formal sustainability reporting practices.

Mulyadi (2015), the production cost structure is a key component that must be analyzed to determine the efficiency and effectiveness of a company's operations. Production costs refer to expenditures incurred in converting raw materials into finished goods ready for sale, consisting of three main elements: Direct Material Cost, Direct Labor Cost, and Factory Overhead Cost (Mulyadi, 2015). This cost structure is crucial to analyze in relation to the application of environmental accounting, as environmentally friendly initiatives may affect one or more of the cost components, either by increasing or reducing specific costs.

Green accounting is an accounting approach aimed at integrating environmental aspects into a company's financial reporting system. This concept emerged in response to the growing global awareness of the environmental impact of economic activities. Through green accounting, companies record not only conventional financial transactions, but also calculate the costs and benefits associated with environmental activities such as waste management, resource conservation, and carbon emissions (Ward & Deegan, 2013). In practice, green accounting encourages business entities to transparently disclose information related to environmental externalities, energy consumption, resource efficiency, and their commitment to social responsibility and sustainability.

The implementation of green accounting also aligns with the principles of the triple bottom line (Elkington (1997) in (Hubbard, 2009), which emphasizes a balance between profitability (profit), social sustainability (people), and environmental preservation (planet). Companies that adopt green accounting tend to have long-term strategic advantages, as they are able to identify environmental risks earlier and design effective mitigation strategies (Qian et al., 2011). Therefore, green accounting functions not only as a reporting tool, but also as a strategic instrument for decision-making in support of sustainable development. Environmentally friendly initiatives in MSME layer poultry farming reflect the conscious efforts of business actors to reduce negative environmental impacts while simultaneously creating economic value. These practices include utilizing chicken manure waste for compost or biogas production, implementing rainwater harvesting systems for coop sanitation, applying energy efficiency through low-power lighting, and reducing the use of chemical agents in

cleaning processes. Such efforts not only support environmental sustainability goals but also contribute to operational efficiency and long-term cost savings. Accordingly, these initiatives align with the *triple bottom line* approach, which emphasizes a balance between profitability, social responsibility, and environmental preservation (Elkington (1997) in Hubbard (2009)).

By applying environmental accounting strategies in MSMEs, it is possible to improve efficiency and strengthen competitive advantage. However, challenges remain, including limited capital, human resources, and environmental cost-recording systems (Qian et al., 2011). Result Research Yolanda's (2022) study found that environmental accounting practices can enhance cost efficiency and corporate accountability. In addition, research by Yakhou & Dorweiler (2004) emphasizes the importance of environmental accounting as an integral part of business strategy.

These environmentally friendly initiatives align with the triple bottom line framework, which emphasizes the importance of incorporating economic, social, and environmental dimensions into every business decision-making process (Hubbard, 2009). By gaining a more comprehensive understanding of the interrelation among these elements, businesses are expected to formulate more adaptive and effective strategies in addressing future sustainability challenges (Meiriani et al., 2022). Hence, the phenomenon observed in MSME layer poultry farming shows that, although there is awareness and adoption of environmentally friendly practices at the MSME level, without adequate support from an appropriate recording system—namely environmental accounting—cost management and strategic decision-making cannot yet be carried out optimally. Therefore, Reban Lestari Farm serves as a relevant case study to explore how environmental initiatives affect production cost structures, while also revealing gaps in the accounting systems of MSMEs that have not yet responded adequately to sustainability issues.

The urgency of this research lies in the need to understand the implementation of environmental accounting within MSME layer poultry farms by examining how environmentally friendly initiatives influence production cost structures and promote more environmentally conscious behavior in the small-scale livestock sector. Furthermore, the findings of this study are expected to contribute not only to academic discourse and business practices but also to inform policymakers in promoting more ethical and sustainable business practices.

## **METHOD**

This study adopts a qualitative approach. Qualitative research is a type of inquiry that prefers to explore phenomena and issues through words rather than numerical data (Sekaran & Bougie, 2016). A qualitative approach was chosen because it enables a deeper and more holistic understanding of the phenomena being studied, allowing the researcher to explore the views, attitudes, and perceptions of MSME actors in depth.

The research was conducted at Reban Lestari Farm, located in Sani-Sani Village, Samaturu Subdistrict, Kolaka Regency, Southeast Sulawesi. The sole informant in this study is the business owner of Reban Lestari Farm Kolaka, an MSME whose primary production is chicken eggs. The informant was selected based on specific criteria relevant to the objectives of the research.

This study falls under the category of qualitative descriptive research, which aims to provide an in-depth depiction of the environmentally friendly initiatives implemented by layer poultry farming MSMEs and their influence on the production cost structure. The descriptive qualitative approach was used to explore and understand various forms of initiatives that impact cost structures and support environmental accounting-aligned reporting. Data collection was carried out through interviews. The interviews were guided by an open-ended question framework, allowing respondents to answer freely and thus providing more detailed and in-depth data regarding the use of residual materials from poultry production activities.

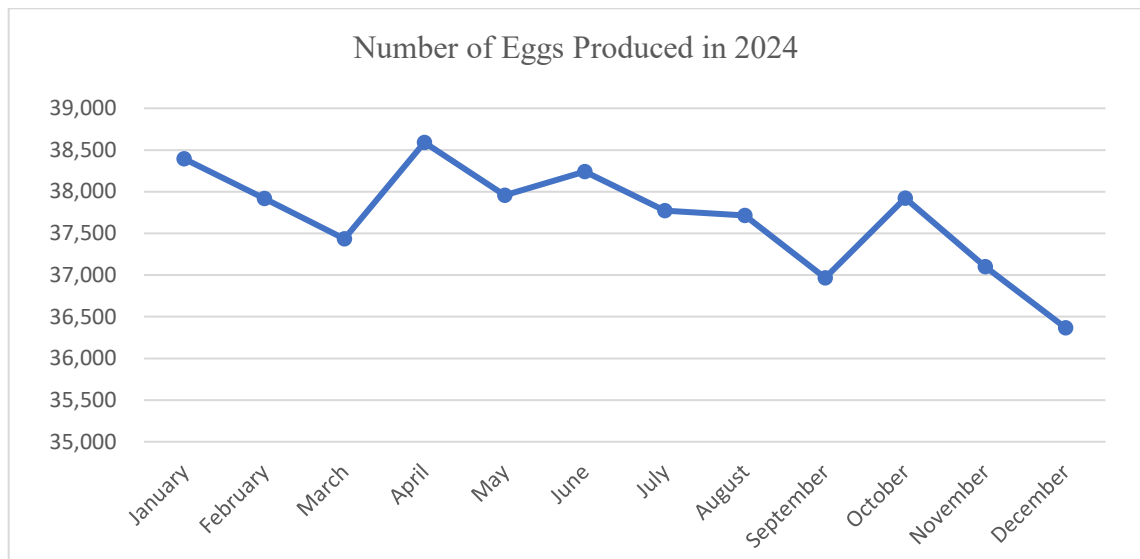
Data analysis in this study employed the technique proposed by Miles & Huberman, (1994), which involves data reduction, data display, and conclusion drawing. The aim of using this method is to provide a comprehensive description and obtain a clear understanding to answer the research problem, namely, the application of environmental accounting in MSME layer poultry farming by examining the impact of environmentally friendly initiatives on the production cost structure.

## **RESULTS AND DISCUSSION**

### **Results**

This research was conducted based on field observations and in-depth interviews to obtain comprehensive findings. The results indicate that Reban Lestari Farm has achieved relatively largescale egg production. Laying hens generally have a productive lifespan of approximately 90 to 110 weeks, or around 20 to 24 months. The initial productive period

typically begins when hens are around 20 to 25 weeks old. Within this age range, a significant portion of the hens will produce eggs on a daily basis.

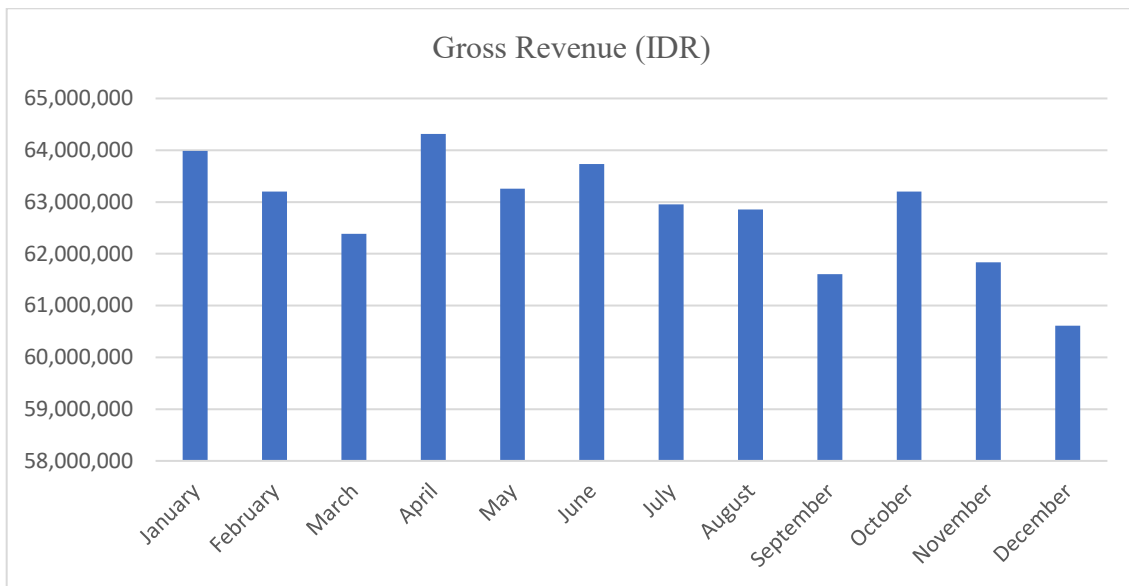


Graphic 1 Number of Eggs Produced in 2024

Figure 1 illustrates the monthly egg production trend at Reban Lestari Farm Kolaka throughout the year 2024, from January to December. In general, the number of eggs produced each month remained relatively stable, ranging from approximately 36,000 to 38,500 eggs per month, although some fluctuations were observed during the year. In January 2024, egg production reached around 38,200 eggs, followed by a slight decline in February, and hitting a temporary low in March with approximately 37,300 eggs. A significant spike occurred in April, reaching 38,600 eggs the highest point recorded in the chart. This was followed by a gradual decrease in May and June, though production remained above 37,500 eggs. The downward trend continued through September, reaching a low of around 37,000 eggs. Interestingly, a sharp recovery occurred in October, bringing production close to 38,000 eggs once again. However, the decline resumed in November and December, with December 2024 marking the lowest production level at approximately 36,300 eggs.

Overall, the production pattern shows mild to moderate fluctuations, potentially influenced by seasonal factors, climatic conditions, or managerial variables such as changes in feed, livestock health, and the implementation of environmentally friendly initiatives. Despite the decline toward the end of the year, production remained relatively stable and demonstrated consistent performance throughout the year. Meanwhile, the gross monthly revenue generated from the sale of eggs produced by the laying hens is

presented in Figure 2 below.



Graphic 2 Gross Revenue in 2024

Figure 2 illustrates the monthly fluctuations in gross revenue throughout 2024. The highest revenue was recorded in April, amounting to approximately IDR 64,316,667, followed by January and June. In contrast, the lowest revenue occurred in December, at around IDR 60,613,333. Overall, the data reveals a gradual downward trend in revenue toward the end of the year, reflecting the influence of egg production levels on the financial stability of the business.

On the other hand, monthly expenditures in layer poultry farming are estimated to range between IDR 38,500,000 and IDR 40,000,000. In general, operational costs account for approximately 55% to 80% of the monthly gross revenue. The main components of these costs include feed, vitamins and vaccines, labor, electricity, water, and coop maintenance. For instance, in a farm with 1,000 laying hens, feed expenses represent the largest cost component, reaching up to tens of millions of rupiah per month approximately IDR 16,000,000 to IDR 22,000,000 depending on feed prices and the hens' daily consumption rates.

Findings from field research and interviews indicate that Reban Lestari Farm, as an MSME in layer poultry farming, has developed additional income streams through the sale of processed chicken manure to local vegetable farmers near the farm. In addition, once the productive cycle of the hens ends, the chickens can be sold to poultry meat vendors. These practices demonstrate the business owner's initiative to diversify income sources by adopting environmentally friendly practices.

## Discussions

The findings of this study indicate that Reban Lestari Farm has implemented several environmentally friendly initiatives that directly affect its production cost structure. While these initiatives do not result in substantial cost savings, they contribute to cost efficiency and reflect commitment to business sustainability and the principles of environmental accounting. The following table presents a summary of the environmentally friendly initiatives undertaken by Reban Lestari Farm.

**Table 1 Environmentally Friendly Initiatives and Their Impact on Production Costs in Layer Poultry Farming**

No	Environmentally Friendly Initiatives	Investment Value	Impact on Production Costs	Types of Costs
1.	Water Sterilization (UV Filter, Chlorine/Bleaching Powder)	IDR 2.000.000,- to IDR 3.000.000,-	<ul style="list-style-type: none"> <li>- Reduction in Livestock Treatment Costs: With sterilized water, chickens remain healthier and the risk of disease is reduced, thereby lowering expenses related to medication or veterinary services.</li> <li>- Increased Egg Productivity: Healthy chickens tend to produce more eggs consistently.</li> </ul>	Factory Overhead Cost (Maintenance of Water Equipment and Sterilization Materials)
2.	Purchasing cyromazine medication	IDR50.000 / month	<ul style="list-style-type: none"> <li>- Reduces the need for additional disinfectants, as cyromazine is more effective in targeting the source of flies (larvae in chicken manure).</li> <li>- Improves coop comfort and chicken health, thereby reducing stress levels in chickens and helping to maintain egg productivity.</li> </ul>	Factory Overhead Cost (Environmental Supportive Agents for Poultry Housing)
3.	Converting chicken manure waste into compost fertilizer	IDR100.000,- / month	<ul style="list-style-type: none"> <li>- Reduces transportation or waste disposal costs.</li> <li>- Eliminates outsourcing costs for waste management (if previously handled by a third party).</li> <li>- Creates new revenue potential: Compost can be sold or used for internal agricultural purposes.</li> <li>- Involves increased equipment and maintenance costs (see composting equipment maintenance components), but these are offset by cost savings and potential income.</li> </ul>	Factory Overhead Cost (Waste Management & Equipment)
4.	Use of Energy-Efficient LED Lighting	IDR 900.000,-	<ul style="list-style-type: none"> <li>- Reduces electricity costs</li> <li>- Decreases electricity consumption by 40–60% compared to conventional lighting</li> </ul>	Factory Overhead Cost (Electricity & Maintenance)

Source: Research Data, 2025

Table 1 illustrates that in an effort to implement the principles of environmental accounting and achieve production cost efficiency; the layer poultry farm has adopted several environmentally friendly initiatives that significantly contribute to reducing operational cost burdens. One such initiative is the application of a water sterilization system using UV filters or chemical agents such as chlorine or bleaching powder, with an initial investment ranging from IDR 2,000,000 to IDR 3,000,000. This initiative has proven effective in reducing livestock treatment costs by improving water quality, directly impacting the health of the chickens and enhancing egg productivity. These expenses are classified as Factory Overhead Costs, specifically under the maintenance of water equipment and sterilization materials.

In addition, the routine use of cyromazine medication, costing around IDR 50,000 per month, has become an effective strategy for reducing the need for additional disinfectants. This medication helps control fly populations by targeting their primary source larvae in chicken manure thereby improving coop hygiene and comfort. The positive impact includes reduced chicken stress levels and consistent egg production. This investment also falls under Factory Overhead Costs, particularly as an environmental control expense within the poultry housing.

Furthermore, the management of chicken manure waste, which is converted into compost fertilizer at a monthly cost of around IDR 100,000, yields dual benefits. In addition to eliminating the need for outsourcing waste disposal services, this initiative also generates potential revenue from compost sales or its use in an integrated farming system. Although there are added equipment and maintenance costs for composting tools, they remain within the Factory Overhead Cost classification, especially under waste management and equipment.

Lastly, replacing conventional lighting with energy-efficient LED lamps, costing IDR 900,000, has successfully reduced electricity consumption by 40–60%. This initiative not only supports carbon emission reduction but also has a direct impact on monthly electricity cost efficiency. It is categorized as a Factory Overhead Cost, under electricity and maintenance components.

Collectively, these four initiatives not only represent sustainable practices in layer poultry farming but also reflect a strategic approach to production cost control based on environmental accounting principles. Through the application of environmental accounting at Reban Lestari Farm, it is evident how such efforts contribute to improving efficiency and strengthening competitive advantage. However, challenges remain, such

as limited capital, human resources, and the absence of a structured environmental cost recording system (Qian et al., 2011). In terms of comparison, the differences in production cost structures before and after the implementation of these environmentally friendly initiatives are noteworthy. Table 2 presents a comparative overview of production costs at Reban Lestari Farm before and after the adoption of environmental initiatives.

**Table 2 Comparison of Production Cost Structure Before and After the Implementation of Environmentally Friendly Initiatives**

<b>Cost Component</b>	<b>Before Initiative (IDR)</b>	<b>After Initiative (IDR)</b>	<b>Description</b>
Direct Material	22,000,000 / month	22,000,000 / month	Unchanged
Direct Labor	2,000,000 / month	2,000,000 / bulan	Unchanged
Factory Overhead – Electricity & Water	750,000 / month	500,000 / month	Use of energy-efficient LED lighting and water recycling reduces utility costs.
Factory Overhead – Waste Management	500,000 / month	100,000 / month	Waste composed and sold, reducing disposal costs and generating income.
<b>Factory Overhead – Equipment Maintenance</b>	1.200,000	2.000,000 – 3.000.000	Sterilized water using UV/chlorine; improves livestock health & reduces meds.

Source: Research Data, 2025

Table 2 illustrates that the implementation of various environmentally friendly initiatives in the operations of the layer poultry farm has had a tangible impact on cost efficiency, particularly within the Factory Overhead Cost components. Based on comparative data, the Direct Material and Direct Labor components remained stable at IDR 22,000,000 and IDR 2,000,000 per month, respectively. This indicates that environmentally friendly initiatives do not directly affect core or structural production costs. However, significant effects are observed in several overhead components. For instance, electricity and water expenses, which were previously IDR 750,000 per month, decreased to IDR 500,000 following the use of energy-efficient LED lighting and water recycling practices. This reduction reflects successful energy efficiency through the application of simple yet impactful technologies.

Moreover, a substantial decrease in waste management costs is evident, falling from IDR 500,000 to just IDR 100,000 per month. This was made possible through the

conversion of chicken manure into compost fertilizer. This strategy not only reduces dependence on third-party waste disposal services but also creates new revenue opportunities and adds value to by-products of production.

Conversely, there was an increase in the equipment maintenance cost component, rising from IDR 1,200,000 to between IDR 2,000,000 and IDR 3,000,000 per month. This increase resulted from investments in a water sterilization system, including the use of UV filters and chemical agents such as chlorine or bleaching powder. Nonetheless, this increase is considered strategic, as it contributes to improved poultry health and a reduction in treatment costs, thereby supporting long-term production cost efficiency.

Thus, the implementation of environmentally friendly initiatives in layer poultry farming operations not only demonstrates compliance with sustainability principles but also brings tangible benefits in the form of cost efficiency and improved production process effectiveness. These findings are consistent with research by Yolanda (2022), which shows that environmental accounting practices can enhance cost efficiency and corporate accountability. Additionally, a study by Yakhou & Dorweiler (2004) affirms the importance of environmental accounting as a part of business strategy.

However, in this study, the application of green accounting in financial reporting remains limited, as evidenced by the incomplete preparation of financial statements. Most MSME layer poultry farms only prepare simple income statements without supporting balance sheets or notes to the financial statements. This condition results from the absence of a proper accounting system. Typically, financial records are kept in a basic format, recording only cash inflows and outflows without account classification or systematic measurement of assets and liabilities. Consequently, environmental cost information such as waste management, energy efficiency, and investment in environmental support tools cannot be properly recorded or reported. As a result, the financial statements do not yet fully reflect the principles of environmental accounting and hinder the integration of sustainability aspects into business decision-making. This aligns with the findings of Hastuti et al., (2021) which identified that MSMEs in the layer poultry sector still face challenges in implementing adequate accounting practices, particularly during the COVID-19 pandemic. Nevertheless, what is most important thus far is that MSME actors in the layer poultry sector have begun designing strategies based on environmental accounting while identifying cost areas that can be optimized to enhance both efficiency and sustainability. This analysis also assists MSMEs in

anticipating implementation challenges and developing contextual, long-term-oriented solutions.

## CONCLUSION

Based on the research findings and discussion, it can be concluded that the implementation of environmentally friendly initiatives in layer poultry farming has had a positive impact on production cost efficiency without compromising productivity. The initiatives implemented include the use of a water sterilization system, application of cyromazine medication, conversion of chicken manure into compost, and the replacement of conventional lighting with energy-efficient LED lamps. The analysis indicates that fixed cost components such as direct materials and direct labor remained unchanged. However, there was a significant reduction in several components of the Factory Overhead Cost, particularly electricity and water expenses, which decreased from IDR 750,000 to IDR 500,000 per month, and waste management costs, which dropped drastically from IDR 500,000 to IDR 100,000 per month. Although equipment maintenance costs increased due to the implementation of the water sterilization system (rising from IDR 1,200,000 to IDR 2,000,000–3,000,000), this investment is considered to have a long-term positive impact on poultry health and production stability. Overall, environmentally friendly initiatives have proven not only to support sustainability principles in poultry farming but also to deliver tangible operational cost efficiency. Therefore, this approach deserves consideration as a sustainable, cost-effective, and productivity-oriented business management strategy.

## REFERENCES

- Hansen, D. R., & Mowen, M. M. (2015). *COST MANAGEMENT: ACCOUNTING AND CONTROL* (6th ed.). Cengage Learning.
- Hansen, D. R., Mowen, M. M., & Guan, L. (2009). *COST MANAGEMENT: ACCOUNTING AND CONTROL*. In *Cengage Learning*.
- Hastuti, H., Hasnidar, H., & Bustang, B. (2021). OBSTACLES AND STRATEGIES FOR THE SUSTAINABILITY OF INDONESIAN SMALL AND MEDIUM ENTERPRISES DURING COVID-19 PANDEMIC: A STUDY CASE AT REBAN LESTARI FARM KOLAKA SULAWESI TENGGARA. *Livestock and Animal Research*, 19(3), 255–264.
- Hubbard, G. (2009). *MEASURING ORGANIZATIONAL PERFORMANCE:*

- BEYOND THE TRIPLE BOTTOM LINE. *Business Strategy and the Environment*, 18(3), 177–191.
- Meiriani, I. R., Dunakhir, S., & Samsinar, S. (2022). PENGARUH PENERAPAN GREEN ACCOUNTING TERHADAP PROFITABILITAS PADA PERUSAHAAN SEKTOR PERTAMBANGAN YANG TERDAFTAR DI BURSA EFEK INDONESIA (BEI). *Artikel Mahasiswa*.
- Miles, M. B., & Huberman, A. M. (1994). *QUALITATIVE DATA ANALYSIS: AN EXPANDED SOURCEBOOK*. sage.
- Mulyadi. (2015). *AKUNTANSI BIAYA* (5th ed.). Sekolah Tinggi Ilmu Manajemen YKPN.
- Putri, A. A. (2024). INTEGRITAS GREEN ACCOUNTING, TANGGUNG JAWAB SOSIAL, DAN PROFITABILITAS: MENCIPTAKAN NILAI BERKELANJUTAN BAGI PERUSAHAAN. *Ilmu Ekonomi Manajemen Dan Akuntansi*, 5(2), 520–530.
- Qian, W., Burritt, R., & Monroe, G. (2011). ENVIRONMENTAL MANAGEMENT ACCOUNTING IN LOCAL GOVERNMENT: A CASE OF WASTE MANAGEMENT. *Accounting, Auditing & Accountability Journal*, 24(1), 93–128.
- Sari, A. R., & Hwihanus, H. (2023). PERANAN SISTEM INFORMASI AKUNTANSI TERHADAP PERKEMBANGAN USAHA MIKRO KECIL MENENGAH (UMKM) PADA HISANA FRIED CHICKEN DI SURABAYA. *Journal of Management and Creative Business*, 1(1), 162–174.
- Sari, S. P., Permana, I., Hutabarat, A. L. R., Sari, D., Nurtanti, I., Azis, A. R., Wijayanti, D. A., & Vertygo, S. (2024). *PENGELOLAAN LIMBAH PETERNAKAN PETERNAKAN* (1st ed.). Get Press Indonesia.
- Sekaran, U., & Bougie, R. (2016). *RESEARCH METHODS FOR BUSINESS: A SKILL-BUILDING APPROACH* (Seventh Ed). John Wiley & Sons.
- Syukri, M., Fitri, S. M., & Suandi, S. (2025). SOSIALISASI PENCATATAN AKUNTANSI HIJAU DAN PENGELOLAAN DANA CSR PADA USAHA AYAM PETELUR KELOMPOK TERNAK PATUH ANGEN. *Devote: Jurnal Pengabdian Masyarakat Global*, 4(2), 228–231.
- Ward, A. M., & Deegan, C. (2013). *EBOOK: FINANCIAL ACCOUNTING AND REPORTING: AN INTERNATIONAL APPROACH*. McGraw Hill.
- Wheelen, T. L., & Hunger, J. D. (2012). STRATEGIC MANAGEMENT AND

BUSINESS POLICY: CONCEPTS AND CASES. *(No Title)*.

Yakhou, M., & Dorweiler, V. P. (2004). ENVIRONMENTAL ACCOUNTING: AN ESSENTIAL COMPONENT OF BUSINESS STRATEGY. *Business Strategy and the Environment*, 13(2), 65–77.

Yolanda, D. (2022). *ANALISIS PENERAPAN GREEN ACCOUNTING (STUDI KASUS PADA PETERNAKAN AYAM TRIKARYA DI KOTA TANJUNGPINANG)*. STIE Pembangunan Tanjungpinang.