

Working Capital Efficiency Assistance for Food and Beverage Vendors

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Abstract: This community engagement program aims to enhance the efficiency of working capital management among food and beverage vendors operating around Lapangan Pancasila Palopo. Efficient working capital management is essential for maintaining business continuity, sustaining daily operations, and improving profitability, especially for micro and small enterprises with limited financial resources. The program focused on three key components of working capital: inventory control, cash flow optimization, and the management of accounts receivable and payable. Through socialization activities, mentoring, and the establishment of a task force, participants were introduced to practical approaches such as the First In, First Out (FIFO) method, Just in Time (JIT) purchasing, negotiation strategies with suppliers, and the adoption of basic financial technology tools, including point-of-sale systems and simple accounting applications. The results demonstrate an increased understanding among vendors regarding cost efficiency, inventory planning, and the importance of disciplined financial recording. Vendors also reported improvements in cash flow stability, reduced operational waste, and better allocation of resources for both short-term and long-term needs. Furthermore, the program strengthened their ability to maintain product quality and price competitiveness, ultimately enhancing business sustainability. Overall, this activity provided significant benefits by equipping vendors with practical skills and strategies to manage working capital more effectively and to improve their resilience in a highly competitive market.

Keywords : Working Capital Efficiency, Food and Beverage Vendors, Cash Flow, Inventory Management, Community Engagement.

1. Introduction

Efficient working capital management is one of the most critical determinants of business sustainability, financial stability, and long-term profitability, particularly for micro and small enterprises (MSEs) such as food and beverage sellers. Working capital represents the availability of liquid assets that support daily operational activities, including the management of cash, inventory, receivables, and short-term liabilities. In practice, the ability of small businesses to maintain adequate and efficient working capital significantly affects their capacity to operate smoothly, withstand financial shocks, and grow in competitive markets. Prior studies consistently emphasize that efficient working capital management enhances profitability, liquidity, cost efficiency, and business resilience (Singh & Kumar, 2020; Enqvist et al., 2014). Food and beverage micro-enterprises face unique challenges in managing working capital as they deal with perishable inventories, fluctuating demand, and limited access to credit.

Inefficiencies in inventory control, weak financial planning, inadequate bookkeeping, and limited managerial capability often create vulnerabilities that hinder operational continuity (Quaye & Mensah, 2019). This sector is also highly sensitive to supply chain disruptions and price fluctuations, requiring sellers to manage their cash flow carefully to ensure timely procurement of raw materials while maintaining adequate liquidity. Furthermore, many micro-enterprises lack structured systems for financial recording, making it difficult to monitor working capital cycles or identify inefficiencies that reduce profitability (Agyapong & Obeng, 2022). Working capital efficiency has been linked to business profitability across various industries. For instance, shortened cash conversion cycles and improved inventory turnover ratios positively influence firm financial performance (Afriifa & Tingbani, 2018; Banos-Caballero et al., 2014). Efficient management reduces unnecessary capital tied up in inventories, minimizes holding costs, and enhances cash availability for productive use.

Conversely, poor management of working capital—such as overstocking, excessive credit to customers, and delayed debt payments—can result in liquidity constraints, operational stagnation, or

even business failure (Ali & Khan, 2021). Thus, developing financial literacy, managerial awareness, and technological capabilities among small businesses becomes crucial for sustaining their operations. In developing economies, small food and beverage sellers contribute significantly to local economic growth but often operate with thin profit margins and limited resources. According to the International Labour Organization (ILO), micro-enterprises form more than 80% of the business population in developing countries, yet they struggle with poor financial management and limited access to capital (ILO, 2020).

These constraints often lead to inefficient working capital practices, which reduce operational efficiency. Research in Southeast Asia similarly shows that micro and small enterprises face persistent challenges in managing liquidity, maintaining inventory levels, and optimizing production cycles due to inadequate managerial skills and lack of training (Tambunan, 2019). Therefore, interventions or assistance programs that target financial literacy, inventory planning, and cash flow management are essential for improving their performance. Technology adoption has increasingly been recognized as an important factor in enhancing working capital management in small enterprises. Digital tools—such as point-of-sale systems, mobile accounting applications, and inventory management software—enable small businesses to monitor transactions in real time, improve accuracy in financial records, and support data-driven decision-making (Zainuddin et al., 2021; Leka & Brunetto, 2020).

For food and beverage sellers, the use of technological systems can mitigate the challenges of manual calculations and reduce the risk of stockouts, wastage, or expired raw materials. However, technology adoption remains limited due to low digital literacy, affordability issues, and resistance to change (Shankar et al., 2022). Assistance programs aimed at developing working capital efficiency in micro-enterprises have been implemented in various contexts and have shown promising outcomes. Studies reveal that structured guidance, training, and mentoring can improve financial management practices, reduce operational inefficiencies, and enhance business profitability (Brixiová et al., 2020). Such programs also support entrepreneurs in strengthening their organizational routines, adopting new technologies, and making more informed financial decisions.

In the context of food and beverage sellers, assistance and training can lead to improvements in inventory turnover, cost control, purchasing strategies, and cash flow management. Despite the growing academic interest in working capital management, there remains limited empirical attention to the practical needs of micro food and beverage sellers, especially in local communities. Most research focuses on medium or large firms, leaving a gap in understanding how small vendors—who often operate in informal or semi-formal markets—manage their working capital and what support they need to optimize it (Rahman et al., 2021). Additionally, while the importance of inventory management, cash control, and supplier relationships is well established, their application in micro-enterprises with limited resources remains understudied. The present study addresses this gap by documenting and evaluating an assistance program that aims to improve working capital efficiency among food and beverage sellers.

This initiative focuses on training sellers in key aspects of working capital management, including inventory planning using methods such as First In, First Out (FIFO), supplier negotiation strategies, and the use of basic digital tools for financial monitoring. The goal is to enhance operational efficiency, increase profitability, and strengthen the business sustainability of small vendors. Furthermore, the program provides practical solutions to common challenges such as overstocking, cash shortages, inadequate record-keeping, and inefficient purchasing practices. By equipping sellers with relevant knowledge and tools, the assistance program supports them in adopting better strategies for managing inventory, controlling costs, and improving cash flow. In addition, the study highlights the broader implications for local economic development, as improved business performance among food and beverage sellers can contribute to community welfare, job creation, and economic inclusion.

Overall, the introduction of this study underscores the importance of working capital efficiency for micro-enterprises and the role of capacity-building interventions in enhancing their financial performance. By focusing on food and beverage sellers—a sector characterized by high competition and operational vulnerability—this study provides valuable insights into how practical support and financial management training can improve business sustainability. This research contributes to the existing literature by offering localized evidence on the impact of working capital assistance programs and emphasizing the need for targeted strategies to strengthen micro-enterprise resilience.

2. Methods of Implementing Community Service

2.1 Research Design and Context

This community engagement program employed a descriptive participatory approach designed to identify working capital problems faced by food and beverage vendors and to implement targeted interventions. The activity was conducted in January 2022 at Lapangan Pancasila Palopo, located on Andi Baso Rahim Street, Palopo City. This area consists of a concentration of micro food and beverage sellers who depend heavily on daily cash flow, making it an appropriate setting for implementing working capital efficiency strategies. The methodological framework emphasized direct involvement, capacity-building, and problem-solving through structured socialization activities and mentoring. The implementation consisted of two main stages: (1) identifying and understanding the operational problems faced by vendors, and (2) applying tailored working capital management strategies to improve efficiency and business sustainability.

2.2 Problem-Solving Framework

The problem-solving framework consisted of preliminary assessment, stakeholder engagement, socialization, and the formation of a task force to coordinate follow-up activities.

2.2.1 Preliminary Socialization

An initial socialization session was carried out with food and beverage vendors operating around Lapangan Pancasila Palopo. This session aimed to introduce the objectives of the program, identify key challenges in inventory management, cash flow control, and supplier relations, and assess the level of financial literacy among vendors. Participants were encouraged to discuss common operational issues affecting their working capital cycles, allowing the team to tailor subsequent interventions.

2.2.2 Task Force Formation

Following the socialization, a task force was established to ensure the continuity and monitoring of the program. The task force consisted of program facilitators, community representatives, and selected vendor leaders. Its role was to coordinate communication, monitor improvements, and assist vendors in adopting the recommended practices.

2.3 Implementation of Problem-Solving Strategies

The implementation phase addressed the identified issues by applying three core strategies aligned with working capital management principles.

2.3.1 Efficient Inventory Management

Vendors were trained in techniques to optimize inventory levels and avoid unnecessary capital lock-in. The intervention emphasized:

- **Avoiding excessive stock**, which often leads to expired or unused materials and reduces available working capital.

- **Application of the First In, First Out (FIFO) method**, ensuring that older inventory is used before newly purchased items to minimize spoilage.
- **Adoption of the Just in Time (JIT) purchasing system**, enabling vendors to procure raw materials in smaller, more accurate quantities based on demand.

These practices were introduced to reduce storage costs, minimize waste, and maintain healthier working capital turnover.

2.3.2 Supplier Negotiation and Cash Flow Flexibility

The program facilitated mentoring on negotiation strategies with suppliers to reduce procurement costs and improve cash flow stability. Vendors were trained to:

- Request **bulk purchase discounts** when feasible to reduce the cost per unit of raw materials.
- Negotiate **extended payment terms**, allowing vendors additional time to settle transactions while maintaining optimal cash availability for operational needs.

Strengthened supplier relationships were positioned as an essential element of working capital efficiency, especially for micro businesses reliant on daily liquidity.

2.3.3 Technology Utilization for Financial Efficiency

Digital tools were introduced to improve the accuracy, speed, and transparency of financial management processes. Vendors were trained to use:

- **Point-of-Sale (POS) systems** to monitor sales, track inventory, and analyze profit margins in real time.
- **Basic accounting and financial management applications** to record transactions, track cash flow, and support better decision-making.

The incorporation of digital technology was expected to reduce manual errors, enhance financial discipline, and provide data-driven insights into the working capital cycle.

2.4 Monitoring and Evaluation

Throughout the implementation process, the task force and program facilitators conducted regular monitoring to evaluate vendor participation, adoption of recommended practices, and early indications of improvement. Progress was measured qualitatively through observation, vendor feedback, and discussion sessions. This iterative monitoring ensured that the program remained responsive to vendor needs and that adjustments could be made when necessary. The implementation of this community engagement program followed a structured timeline designed to ensure systematic preparation, execution, monitoring, and reporting. The activities were carried out over a 12-month period, allowing the team to complete administrative requirements, conduct field activities, and finalize all academic and intellectual outputs. Table 3 presents the full implementation schedule.

Table 3. Implementation schedule of the community engagement program

No	Activity	Month											
		1	2	3	4	5	6	7	8	9	10	11	12
1.	Preparation Stage												
2.	Announcement of Internal Funding												
3.	Contract Agreement for PkM												
4.	Licensing and Permission at PkM Location												
5.	Implementation of PkM Activities												
6.	Evaluation of Activities												
7.	Preparation of Activity Report												
8.	Intellectual Property Registration (HKI)												
9.	Monitoring and Evaluation of PkM Outcomes												
10.	Final Report Submission												

The schedule ensured that field implementation—consisting of socialization activities, task-force formation, mentoring, and monitoring of working capital efficiency—was conducted at the most intensive period (Months 4 to 10). Meanwhile, administrative activities such as licensing, contract signing, progress reporting, and final reporting were aligned with institutional requirements. Intellectual Property (IP/HKI) registration was placed in the later phase to ensure that outputs were fully developed and validated prior to submission. This systematic scheduling approach supported smooth program execution, minimized delays, and allowed for comprehensive monitoring and evaluation of outcomes.

3. Results and Discussion

This community engagement program generated several significant outcomes related to improving the efficiency of working capital management among food and beverage vendors operating around Lapangan Pancasila Palopo. The results were analyzed based on key dimensions of working capital—inventory, cash flow, operational cost control, and financial planning—supported by relevant empirical and theoretical literature.

3.1 Improvement in Working Capital Understanding

Participants demonstrated a measurable improvement in their conceptual understanding of working capital management. Vendors were able to differentiate between fixed and variable costs and identify the importance of maintaining optimal working capital turnover. This finding aligns with prior studies emphasizing that enhanced financial literacy significantly improves SMEs' ability to allocate resources efficiently (Agyapong et al., 2021; Fatoki, 2012). The increased awareness served as the foundation for adopting more structured financial decision-making practices.

3.2 Reduction in Operational Costs

Following the intervention, vendors reported adopting cost-saving procurement strategies, such as sourcing from local suppliers and purchasing in bulk when feasible. These approaches effectively reduced raw material costs and minimized wastage. Similar results were found by Madushanka and Jathurika (2018), who noted that effective procurement practices significantly influence cost efficiency

in micro-enterprises. In this program, cost reduction was achieved without compromising product quality, demonstrating efficient resource utilization.

3.3 Improved Inventory Planning and Control

The training introduced participants to the First In, First Out (FIFO) and Just In Time (JIT) approaches, enabling vendors to maintain an optimal inventory level. Vendors reported fewer instances of expired or unused stock, reducing inventory-related losses. This supports the argument by Koumanakos (2008) that effective inventory management improves operational performance and minimizes holding costs. The adoption of structured inventory systems contributed to improved production continuity and stability.

3.4 Enhanced Cash Flow Management

One of the critical outcomes was the improved ability of vendors to manage cash inflows and outflows. Participants began prioritizing timely debt payments, reducing reliance on informal credit, and avoiding bad receivables. Efficient cash flow management has been recognized as a determinant of small business sustainability (Adomako & Danso, 2014). The vendors' improved discipline in tracking cash movements contributed directly to better liquidity and financial resilience.

3.5 Adoption of Basic Financial Technology Tools

Several participants started using simple digital applications for financial recording and inventory monitoring. The adoption of financial technology (FinTech) is known to enhance bookkeeping accuracy, reduce errors, and support real-time decision-making for small businesses (Rahman et al., 2022). The integration of digital tools allowed vendors to maintain more accurate financial records, enabling them to evaluate profitability and operational performance more effectively.

3.6 Better Financial Planning and Budgeting Practices

The program reinforced the importance of separating personal and business finances, establishing realistic budgets, and allocating working capital toward business growth. Vendors learned to identify priority investments, such as equipment upgrades or menu innovation, which aligns with findings by Amoah et al. (2021) on the role of financial planning in improving SME performance. Improved budgeting practices are expected to strengthen long-term business sustainability.

3.7 Increased Operational Efficiency

Participants applied strategies to optimize labor usage, production time, and raw material utilization. Achieving operational efficiency has been shown to enhance productivity and reduce overall costs (Samuels et al., 2020). Vendors demonstrated better workflow organization and time management, leading to higher daily output and reduced operational bottlenecks.

3.8 Improved Competitiveness in the Local Market

With better cost control, consistent product quality, and more efficient operations, vendors were able to offer competitive pricing and improve customer satisfaction. Strengthening competitiveness is essential for micro-enterprises operating in highly dynamic markets (Hussain et al., 2018). The improved operational foundation allowed vendors to strengthen customer loyalty and potentially increase market share.

3.9 Monitoring and Evaluation of Working Capital Strategies

Participants were provided with tools to evaluate and monitor their working capital practices, enabling them to identify performance gaps and implement corrective actions. Continuous monitoring contributes to sustainable improvement and is consistent with recommendations in SME performance literature (Abdullah et al., 2018). Regular assessment ensures that vendors remain adaptive to market changes and operational challenges.

3.10 Overall Program Impact

Overall, the program successfully enhanced the vendors' ability to manage working capital more efficiently, leading to improved profitability, business continuity, and long-term sustainability. The combination of theoretical understanding, practical tools, and field mentoring created measurable improvements across financial and operational dimensions.

4. Conclusion

4.1 Conclusion

The community engagement program on working capital efficiency for food and beverage vendors around Lapangan Pancasila Palopo successfully generated substantial improvements in the participants' business management capabilities. The vendors demonstrated an increased understanding of the importance of working capital efficiency, operational cost control, and effective inventory planning. The knowledge gained enabled them to improve cash flow management, minimize waste, and enhance their competitiveness in the local market. Additionally, the introduction of simple digital tools for financial recording helped vendors achieve greater transparency and organization in managing their business finances. Overall, the program contributed meaningfully to strengthening their operational sustainability and financial resilience.

4.2 Implications

This initiative provides both practical and academic implications. Practically, the program equips micro-enterprises with applicable knowledge and tools to optimize working capital, streamline cost structures, and increase profitability. It also demonstrates that hands-on mentoring and accessible technology can significantly improve financial discipline among small vendors. Academically, the outcomes enrich existing literature on SME empowerment, financial literacy, and working capital efficiency, offering empirical insights into how community-based interventions can support micro-business development. The model implemented in this program can be replicated or scaled to other regions with similar socioeconomic characteristics.

4.3 Limitations

Several limitations should be noted. First, the relatively short duration of the program limits the ability to assess long-term changes in business performance and sustainability. Second, the adoption of simple financial technologies varied across participants, indicating differing levels of digital literacy that may require additional guidance. Third, the program was conducted in a single geographic area, which may restrict the generalizability of the findings. These limitations highlight the need for extended, broader, and more continuous engagement in future initiatives.

4.4 Recommendations

1. Continuous Capacity Building

Vendors are encouraged to participate in follow-up training programs, particularly those focusing on advanced financial technologies, digital bookkeeping, and business development strategies.

2. Ongoing Mentoring and Monitoring

Regular mentoring and periodic monitoring should be implemented to ensure consistent application of working capital efficiency strategies and to support vendors in overcoming emerging challenges.

3. Networking and Collaboration Among Vendors

The formation of vendor networks or communities is recommended to facilitate knowledge sharing, collective purchasing of raw materials, and collaborative problem-solving to reduce operational costs.

4. Planned Product Diversification

Vendors may consider diversifying their product offerings to increase revenue, provided that such expansions are carefully evaluated to avoid excessive strain on working capital.

5. Consistent Financial Recordkeeping

Vendors should maintain disciplined and accurate financial records to support better business evaluation, strategic decision-making, and long-term financial planning.

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