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Strengthening Economy with Criwik's Local Durian Seedling Cultivation: A Community Services Approach

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Abstract

Durian, as a significant cultural and economic asset in Rembang Regency, the project engages a farmers' group to enhance seedling production and promote sustainable agricultural practices. Through a series of workshops and training sessions, participants gain hands-on experience in nursery management, propagation techniques, and organic farming methods. This initiative aims not only to improve the quality and yield of Criwick's local durian seedlings but also to create economic opportunities within the community. By fostering collaboration and knowledge exchange, the project empowers local farmers to establish nurseries and increase their income potential. Additionally, the initiative emphasizes the importance of preserving traditional cultivation practices to ensure the sustainability of Criwick's local durian varieties. The project ultimately demonstrates Criwick's local durian nursery, which consists of seed germination, preparation of nursery media, fertilization, and maintenance. Through these community services, it is expected to provide high-quality Criwick's local durian seedlings. Criwick's local durian seedlings can be used by the community for their own needs or sold. Revitalize the local economy, enhance agricultural resilience, and strengthen community ties. By investing in Criwick's local durian seedling cultivation, this initiative aims to create lasting economic benefits and support the region's cultural heritage.

Keywords Cultural Preservation; Economic Development; Horticulture Improvement; Sustainable Agriculture

1. INTRODUCTION

Durian Criwik is a distinctive horticultural product from Rembang Regency and has been officially registered with the Center for Plant Variety Protection and Agricultural Licensing under number 590/PVL/2018. According to Sawitri et al. (2018), the superior durian from Criwik Village is characterized by an oblong shape, a weight of approximately 600 g, greenish-yellow mature skin, and creamy-white pulp with a balanced bitter-sweet flavor and moderate aroma. Measuring 15 cm in length and 37 cm in circumference, the fruit consists of five segments and contains oblong seeds. Its compact size and unique flavor profile contribute to its popularity in Rembang and surrounding areas (Panda, 2024).

The increasing annual demand for Criwik durian necessitates enhanced production, particularly through the establishment of durian nurseries. These nurseries can provide high-quality seedlings to replace unproductive trees and supply markets beyond Criwik Village. Nursery development is cost-effective, as communities can utilize local resources such as freely available durian seeds, livestock manure for growing media, and rice husks from local rice farming (Muhtadi, 2025). Durian seedlings can fetch prices ranging from IDR 7,000 to IDR 500,000, depending on their quality and market factors (Sinaga et al., 2021). The importance of nursery establishment to meet rising market demand is also noted by Masturi et al. (2020).

Transforming discarded durian seeds into valuable seedlings offers an efficient and sustainable solution (Jassim & Khalil, 2023). Utilizing locally available materials reduces waste while generating new income opportunities. Nursery development also promotes entrepreneurship, improves agricultural skills, and supports the expansion of durian cultivation. As the nursery sector grows, it may stimulate supporting industries such as transportation, packaging, and marketing, creating broader economic impacts. Furthermore, successful nurseries can position the village as a center of expertise in durian cultivation, attracting agro-educational tourism (Nipo et al., 2024).

Liu et al. (2022) emphasize that nursery development can foster research collaboration to enhance seedling quality and disease resistance further. As related industries emerge, economic multiplier effects may occur through specialized services and product innovations. This growth can also strengthen the local service sector, including hospitality and food services, leading to greater rural economic diversification (Jackson, 2004).

The community service initiative on Criwik durian nurseries adopts a holistic approach by providing training, educational materials, and hands-on practice to

enhance local capacity. It promotes the use of local resources, sustainable agricultural practices, and the preservation of the Criwik variety amid the increasing cultivation of external varieties, such as Musang King and Montong (Miano et al., 2025). Environmentally oriented practices also improve ecological resilience by promoting soil conservation, reducing water use, and minimizing chemical inputs, as described by Rehman et al. (2022).

Safeguarding the Criwik durian variety is crucial for conserving agrobiodiversity. Its genetic diversity may support future breeding programs, including resistance to pests, diseases, and climate stresses. Cultivating local varieties, such as Criwik, contributes to food system resilience and reduces dependence on a limited number of commercial cultivars, thereby supporting broader biodiversity and food security (Grover et al., 2024).

2. METHODS

2.1. Activity Location and Participants

Community service activities were carried out in Criwik Village, Pancur District, Rembang Regency, Central Java Province. Partners in this activity are Ngudi Lestari Farmer Groups II and III, which contain local durian farmers of the Criwik variety. There are also several students from the Agrokeoteknologi study program at Diponegoro University and students from the Agribisnis study program at Semarang Muhammadiyah University who participated in the *Merdeka Belajar Kampus Merdeka* (MBKM) program. Community service activities in Criwik Village, Pancur District, Rembang Regency, Central Java Province, focused on supporting local durian farmers. The primary partners in this initiative were the Ngudi Lestari Farmer Groups II and III, which consist of farmers specializing in the cultivation of the criwik variety of durian. This collaboration aimed to enhance agricultural practices and promote sustainable farming techniques specific to durian cultivation in the region.

The project also involved students from diverse academic backgrounds, including those from the agroecotechnology program at Diponegoro University and the agribusiness program at Semarang Muhammadiyah University. These students participated through the Merdeka Belajar Kampus Merdeka (MBKM) program, which translates to "Independent Learning - Independent Campus." This involvement provided students with practical, hands-on experience in agricultural community development, enabling them to apply their theoretical knowledge in real-world scenarios while contributing to the growth and sustainability of the local farming community.

2.2. Materials and Tools

The materials and tools used are local durian seeds, soil, manure, husks, water, polybags, measuring tools, bamboo poles, netting, paddles, hoes, raffia, and knives. The materials and tools utilized in this project encompass a diverse range of items essential for cultivating durian seedlings. Local durian seeds serve as the primary genetic material, while soil, manure, and husks form the growing medium. Water is crucial for irrigation and maintaining proper moisture levels. Polybags are employed as containers for the seedlings, allowing for easy transplantation and management. Meters are used for precise measurements, ensuring optimal spacing and growth conditions.

The setup includes bamboo poles and a net, which likely form a protective structure or shade for the young plants. Various gardening implements, such as paddles, hoes, and knives, facilitate soil preparation, planting, and maintenance tasks. Raffia, a versatile natural fiber, may be used for tying and supporting the growing seedlings. This comprehensive collection of materials and tools demonstrates a well-planned approach to durian cultivation, combining traditional agricultural practices with modern horticultural techniques to optimize seedling growth and development (Toromade *et al.*, 2024).

2.3. Implementation Method

Socialization: The socialization stage is carried out at the beginning of each program year. The community service team will hold community meetings in Criwik Village to introduce the program, listen to input from the community, and explain the benefits of the solutions offered. Additionally, this activity aims to foster community awareness and promote active participation in implementing solutions.

Training: Training is implemented on an ongoing basis, with a focus on enhancing the skills and knowledge of farmers and their related community members. The team starts by introducing their program to the village through community meetings. They listen to what people have to say and explain how their ideas can help. This is done to engage everyone and pique their interest in the project. After that, they provide regular training sessions to teach farmers and other community members new skills and information to improve their work. The ongoing training program for farmers and community members is designed to be comprehensive and adaptive. It begins with introductory community meetings, where the team presents their program and engages in active listening to understand local needs and concerns. This initial step is crucial for building trust and ensuring community buy-in. By explaining

how their ideas can benefit the village, the team aims to generate enthusiasm and participation from the outset.

Following these initial meetings, the program transitions into a series of regular training sessions. These sessions are tailored to address specific skills and knowledge gaps identified during the community meetings. The curriculum encompasses a broad range of topics, including sustainable farming practices, crop diversification, soil management, water conservation techniques, and post-harvest handling. Additionally, the training may extend beyond agricultural practices to include related areas such as financial literacy, market access strategies, and basic business management. This holistic approach ensures that farmers and community members are equipped with a well-rounded skill set to improve their agricultural productivity and overall livelihoods. The training consists of providing material and direct practice in the field.

Mentoring and Evaluation: Following training, the service team will provide direct assistance, monitor progress, and offer solutions to any issues that may arise. Periodic evaluations will be conducted to measure the success rate of solution implementation. Data collection and feedback from partners will serve as the basis for evaluating the program's performance and sustainability. The service team's role extends beyond initial training, encompassing ongoing support and guidance throughout the program's implementation and execution. They will offer direct assistance to partners, addressing immediate concerns and providing real-time solutions to challenges that emerge during the process. This hands-on approach ensures that partners can effectively apply their training and overcome obstacles promptly. Additionally, the team will continuously monitor progress, tracking key performance indicators and milestones to identify areas of success and potential improvement.

To ensure the program's effectiveness and longevity, periodic evaluations will be conducted to assess its progress and effectiveness. These assessments will measure the success rate of solution implementation, providing valuable insights into the program's impact and identifying areas that require refinement. The evaluation process will rely heavily on data collection from various sources, including partner feedback, quantitative metrics, and qualitative observations. This comprehensive approach to data gathering and analysis will inform decision-making processes, allowing for evidence-based adjustments to the program. Ultimately, this iterative evaluation cycle will contribute to the continuous improvement and long-term

sustainability of the program, ensuring it remains relevant and effective in meeting partner needs and achieving desired outcomes.

2.4. Cultivation Method (Nursery of Local Durian Variety Criwik)

The implementation of direct practice in the field is carried out through the practice of local durian nursery criwik. This activity aims to increase the knowledge of durian farmers and students participating in MBKM, and is expected to improve the community's economic future.

Durian nursery activities include seed selection, nursery site preparation, creating growing media, growing, watering, and plant care. Crikwik local durian nursery activities are shown in Figure 1. Implementation of direct practice in the field through the local durian nursery, Criwik, encompasses a comprehensive approach to cultivating and propagating durian trees. This hands-on experience provides valuable knowledge and skills to both durian farmers and students participating in the MBKM program. The process begins with careful seed selection, ensuring that only high-quality seeds from superior durian varieties are chosen for propagation. Following this, participants prepare the nursery site, taking into account factors such as soil quality, drainage, and sunlight exposure. Creating an optimal growing medium is crucial, often involving a mixture of soil, organic matter, and other amendments to promote healthy seedling development.

Figure 1a. Land clearing for durian nurseries

Figure 1b. Paranet installation

Figure 1c. Mixing of growing media

Figure 1d. Filling polybags with growing media

Figure 1e. Planting durian seeds

Figure 1f. criwik durian seedling

Figure 1. Stages of Durian Seedling Preparation, from Land Clearing to Criwik Durian Seedlings

The actual growing process involves planting the selected seeds in the prepared medium and closely monitoring their progress. Regular watering and attentive plant care are essential components of the nursery activities, requiring participants to develop a keen understanding of the specific needs of durian seedlings. This includes proper irrigation techniques, pest and disease management, and nutrient supplementation when necessary. Through these practical experiences, farmers and students gain invaluable insights into the intricacies of durian cultivation, which can be applied to larger-scale operations in the future. Moreover, this knowledge transfer is expected to have a positive impact on the local economy, as improved durian production techniques can lead to higher yields, better fruit quality, and potentially increased market value for the community's durian crops.

3. FINDINGS AND DISCUSSION

3.1. Profile of Ngudi Lestari Farmer Groups II and III

Ngudi Lestari II and Ngudi Lestari III farmer groups are farmer groups that cultivate durian in Criwik Village. In addition to cultivating local durian, members of the Ngudi Lestari II and III farmer groups in Criwik Village raise livestock. They raise livestock using the intensive cut-and-carry system method, where farmers harvest forage every day, which is then given to the livestock daily, and cattle or goats are penned throughout the year. As a form of farmer group concern for the sustainability of local durian varieties, the community collaborates in the development of Criwik Village as a durian icon in Rembang Regency. This commitment to local produce not only helps maintain biodiversity but also potentially creates a unique market niche for the village's agricultural products (Suwitari, N. K. E., *et al.* 2022).

The farmer groups have adopted an intensive cut-and-carry system for their livestock operations, demonstrating a modern and efficient approach to animal husbandry. This method involves daily harvesting of forage, which is then fed to the penned livestock. By keeping the animals confined year-round, farmers can better manage their health, nutrition, and waste, potentially leading to improved productivity and environmental sustainability. This integrated farming system, which combines fruit cultivation with livestock rearing, showcases the farmers' adaptability and resourcefulness in maximizing their agricultural output and income streams (Mwilawa, A. J. et al., 2008).

3.2. Implementation of The Criwik Local Durian Nursery Program

3.2.1. Seed Selection

Local durian seeds are obtained from the people of Criwik village. The seeds selected are from local durian fruit of the Criwik variety, with characteristics that match the description provided by Sawitri *et al*. (2018). The preparation of durian seeds follows the guide from Direktorat Buah dan Florikultura (2021), which involves using medium-sized durian seeds, cleaning the remaining pulp still attached to the seeds, and protecting them from direct sunlight. Local durian seeds, specifically from the Criwik variety, are sourced from the residents of Criwik village. The selection process for these seeds adheres to specific criteria, ensuring they match the characteristics outlined by Sawitri et al. (2018). This careful selection process is crucial for maintaining the authenticity and quality of the local durian variety, preserving its unique traits and genetic makeup.

The preparation of these durian seeds follows the guidelines set forth by Direktorat Buah dan Florikultura (2021), emphasizing the importance of proper handling and processing. Medium-sized seeds are chosen for optimal results. A meticulous cleaning process is undertaken to remove any remaining pulp from the seeds, as residual fruit flesh could potentially interfere with germination or lead to decay. Additionally, the seeds are shielded from direct sunlight, a precautionary measure that helps maintain seed viability and prevents premature drying or damage from excessive heat exposure. These preparation steps are essential for ensuring the seeds' health and maximizing their potential for successful germination and growth.

3.2.2. Nursery Site Preparation

Nursery site cleaning involves removing weeds, garbage, and stones from the nursery site using a knife and a hoe. The nursery site is then leveled using a hoe, and a net is installed with a net to protect durian seedlings from full sunlight. According to Direktorat Buah dan Florikultura (2021), durian seedlings require approximately 60% light. Nursery site cleaning is a crucial initial step in establishing a successful durian seedling nursery. This process involves the thorough removal of weeds, garbage, and stones using basic tools such as knives and hoes. The meticulous cleaning ensures a clean, unobstructed environment for the young seedlings to grow. After cleaning, the site is carefully leveled using a hoe, creating a uniform surface that promotes even water distribution and root development. The final step in site preparation involves the installation of Paranet, a specialized shade netting that regulates light exposure for the delicate durian seedlings.

The use of the paranet is particularly important in durian seedling cultivation. According to the Direktorat Buah dan Florikultura (2021), durian seedlings require

approximately 60% light exposure for optimal growth. The parapet serves as a protective barrier, filtering out excessive sunlight while still allowing sufficient light penetration. This controlled light environment helps prevent sunburn and dehydration in young seedlings, promotes balanced growth, and creates favorable conditions for photosynthesis and overall plant development. By carefully managing light exposure, nursery operators can significantly enhance the survival rate and quality of durian seedlings, setting the foundation for robust, healthy durian trees in the future.

3.2.3. Making Growing Media

In this nursery for growing media, we use soil, manure, and rice husks obtained from the surrounding community. Materials for making growing media are readily available in Criwik Village due to the abundance of soil, manure, and rice husks. Making growing media for durian nurseries following Arsanata et al. (2023) advice, namely soil, manure, and husks in a ratio of 1 1 1 mixed evenly. Using locally sourced materials for growing media in the durian nursery demonstrates a sustainable and cost-effective approach to horticulture. The abundant availability of soil, manure, and rice husks in Criwik Village not only ensures a steady supply of essential components but also promotes a circular economy within the community. By utilizing these readily available resources, the nursery reduces transportation costs and minimizes its environmental footprint.

The recommended ratio of 1:1:1 for soil, manure, and rice husks, as advised by Arsanata et al. (2023), creates an optimal growing medium for durian seedlings. This balanced mixture provides the necessary structure, nutrients, and aeration for healthy root development. The soil component offers stability and mineral content, while the manure contributes essential nutrients and organic matter. Rice husks, a byproduct of rice processing, improve soil structure, enhance drainage, and increase air circulation within the growing medium. This carefully formulated blend ensures that young durian plants receive the ideal conditions for robust growth and development in their early stages.

3.2.4. Growing

Durian seeds are planted by immersing the durian seeds into the soil at the navel (hilum) position facing downwards (Direktorat Buah dan Florikultura, 2021). Durian seeds are typically planted using a specific technique to ensure optimal germination and growth. The process involves carefully positioning the seed in the soil with the navel (hilum) facing downwards. This orientation is crucial as it allows the emerging root system to develop properly and establish a strong foundation for the future plant.

The planting depth and soil conditions are also important factors to consider when cultivating durian from seeds. The seed should be immersed in well-draining, nutrient-rich soil, with adequate moisture levels to promote germination. After planting, regular monitoring and maintenance are essential to ensure the successful development of seedlings. This may include providing appropriate watering, protection from pests, and ensuring optimal light conditions for the young plants to thrive.

3.2.5. Watering and Plant Care

Watering durian seedlings is done twice a day by using a watering can until the growing media reaches field capacity. Durian seedling care consists of removing weeds and selecting healthy seedlings. Seedlings that are retained are healthy seedlings with straight growth. Watering durian seedlings is a crucial aspect of their early care and development. The process involves using a watering can to provide water twice daily, ensuring the growing media reaches field capacity. This consistent watering schedule helps maintain optimal moisture levels in the soil, promoting healthy root development and overall growth of the seedlings. The frequency and amount of water applied are carefully balanced to prevent both underwatering and overwatering, which could lead to stunted growth or root rot, respectively.

In addition to watering, proper care of durian seedlings involves regular maintenance activities. Weeding is essential to eliminate competition for nutrients and water, allowing the young durian plants to thrive. Careful inspection and selection of seedlings are also crucial steps in the care process. Abnormal or diseased seedlings are identified and removed, leaving only healthy specimens with straight growth patterns. This selective approach ensures that resources are focused on nurturing the most promising seedlings, increasing the likelihood of successful cultivation and eventual fruit production. By implementing these comprehensive care practices, growers can establish a strong foundation for healthy durian trees that will yield high-quality fruit in the future.

3.2.6. Harvesting Durian Seedlings

The process from durian seeds to durian seedlings ready for cultivation takes approximately 6 months. The journey from durian seeds to viable seedlings is a lengthy and intricate process that requires patience and careful nurturing. Initially, the seeds are extracted from ripe durian fruits and cleaned thoroughly to remove any remaining pulp. They are then planted in a well-draining growing medium, typically a mixture of soil, sand, and organic matter. The seeds are kept in a warm, humid environment with consistent moisture to encourage germination, a process that can

take anywhere from 3 to 5 weeks.

Once the seeds have sprouted, the young seedlings require attentive care for several months. They are gradually exposed to increasing amounts of sunlight and monitored closely for proper growth and development. During this period, the seedlings are carefully watered and fertilized to ensure they receive adequate nutrients. After approximately 6 months, the durian seedlings reach a size and strength suitable for transplanting into larger containers or directly into the ground. At this stage, they are considered ready for the next phase of growth, marking the beginning of their journey towards becoming mature, fruit-bearing trees.

3.3. Economic Impact

The economic impact of this community service activity will only be seen in the next few years. The primary purpose of this nursery is to replace or rejuvenate the less productive local durian criwik with high-quality seedlings of the same variety. Durian will produce for about 5-10 years in the future. After meeting their own needs for durian seedlings, through this program, it is hoped that the community can provide and sell local durian seedlings of the criwik variety or other local durian varieties in the future, so that it can become an additional source of income for members of the Ngudi Luhur I and II farmer groups, besides durian cultivation and raising livestock. The economic impact of this community service activity is expected to unfold gradually over the coming years, with significant results anticipated in the medium to long term. The primary objective of establishing this nursery is to enhance the productivity of local durian criwik plantations by replacing or rejuvenating less productive trees with high-quality seedlings of the same variety. This strategic approach aims to maintain the unique characteristics of the local durian while improving overall yield and fruit quality. Given that durian trees typically take 5-10 years to reach full production capacity, the full economic benefits of this initiative will not be immediately apparent but are expected to materialize over time.

Beyond meeting the immediate needs of the community for quality durian seedlings, this program has the potential to create additional economic opportunities. As the nursery becomes established and produces surplus seedlings, members of Ngudi Luhur I and II farmer groups may be able to diversify their income streams by selling local durian seedlings, including the criwik variety and other local cultivars. This could provide a valuable supplementary source of income for farmers, complementing their existing revenue from durian cultivation and livestock rearing. Furthermore, the availability of high-quality local seedlings could stimulate broader interest in durian cultivation within the region, potentially leading to the development

of a more robust and diverse local durian industry (Rineksane, I. A. et al 2024)

The economic impact of this community service activity is projected to materialize over the next 5–10 years, primarily through the replacement and rejuvenation of less productive Criwik durian plants with high-quality seedlings. Each mature Criwik durian tree is expected to produce 50–100 kilograms of fruit annually, with a market price ranging from IDR 50,000 to IDR 70,000 per kilogram, generating an estimated annual revenue of IDR 2.5–7 million (USD 160–450) per tree. With the anticipated addition of 100–200 productive trees, the community could see an increased annual revenue of IDR 250 million to IDR 1.4 billion (approximately USD 16,000–90,000). Additionally, farmers can benefit from selling Criwik durian seedlings, priced between IDR 7,000 and IDR 500,000 per seedling. By selling 100–500 seedlings annually, farmers can collectively generate an extra income of IDR 700,000 to IDR 250 million (approximately USD 45–$ 16,000) per year. This initiative also diversifies farmers' income sources by combining durian fruit production with seedling sales, thereby reducing economic risks and enhancing financial stability. By utilizing local resources such as manure, rice husks, and soil, production costs are minimized, ensuring sustainable economic growth. Furthermore, the increased income is likely to stimulate local economic activities, creating a positive multiplier effect that benefits the broader community. Through enhanced agricultural productivity and cost-efficient practices, this program is expected to significantly uplift the economic condition of Ngudi Luhur I and II farmer groups and the Criwik community as a whole. The economic impact of this community service activity is expected to be substantial and far-reaching. Over the next 5-10 years, the replacement of less productive Criwik durian plants with high-quality seedlings is expected to boost agricultural output and income significantly. Each mature Criwik durian tree has the potential to yield 50-100 kilograms of fruit annually, with market prices ranging from IDR 50,000 to IDR 70,000 per kilogram. This translates to an estimated annual revenue of IDR 2.5-7 million (USD 160-450) per tree. The addition of 100-200 productive trees could result in a remarkable increase in annual community revenue, ranging from IDR 250 million to IDR 1.4 billion (approximately USD 16,000-90,000) (Streicher, G et al., 2019).

The economic benefits extend beyond fruit production to include the sale of Criwik durian seedlings, priced between IDR 7,000 and IDR 500,000 each. Farmers could potentially generate an additional income of IDR 700,000 to IDR 250 million (approximately USD 45,000-16,000) annually by selling 100-500 seedlings. This diversification of income sources combines durian fruit production with seedling sales, reducing economic risks and enhancing financial stability for farmers. The

initiative also promotes sustainable economic growth by utilizing local resources such as manure, rice husks, and soil, thereby minimizing production costs. The increased income is expected to have a positive multiplier effect, stimulating local economic activities and benefiting the broader community. Through improved agricultural productivity and cost-efficient practices, this program is poised to significantly elevate the economic condition of the Ngudi Luhur I and II farmer groups and the entire Criwik community (Parniati, P *et al.* 2022).

3.4. Cultural Preservation

Through this community service program, Members of Ngudi Luhur farmer groups I and II expressed pride in their heritage because durian farming has become a characteristic of the residents of Criwik Village. This activity increases community awareness and pride in their village, specifically highlighting that their village has the potential for local durian varieties, such as criwik, with unique flavors and sizes. The community service program has had a significant impact on the members of Ngudi Luhur Farmer Groups I and II, fostering a deep sense of pride in their cultural heritage. Durian farming, now a defining characteristic of Criwik Village, has become more than just an agricultural practice; it represents the community's identity and tradition. This newfound appreciation for their local durian varieties has strengthened the villagers' connection to their roots and enhanced their sense of belonging (Barbarán, F. R. 2011)

The program's success in raising awareness about the unique durian variety has had far-reaching effects on the community. Residents have become increasingly cognizant of their village's distinctive agricultural asset, recognizing the value of their local durian's unusual flavors and sizes. This heightened awareness has not only boosted community pride but also potentially opened up new economic opportunities for the village. By embracing and promoting their unique durian variety, Criwik Village has positioned itself as a notable destination for durian enthusiasts and agricultural tourists, further solidifying its reputation and cultural significance in the region (Chakma, J. *et al.* 2024)

3.5. Sustainability Considerations

This program also encourages integrated farming, given the background of farmer group members who cultivate fruit crops and raise livestock. Farmers can cultivate forage on durian garden land and utilize manure as fertilizer for durian plants. The use of manure or organic fertilizer is expected to gradually increase the physical, chemical, and biological fertility of the soil. The use of manure is not burdensome for farmers because they have an abundant stock of organic fertilizer. It is hoped that this program can increase farmers' opinions while preserving the

environment (Georgiev, G. V., & Nanjappan, V., 2023).

This program promotes integrated farming practices by leveraging the diverse backgrounds of farmer group members who cultivate fruit crops and raise livestock. The integration of these two agricultural activities creates a symbiotic relationship, where farmers can maximize land use by cultivating forage on durian garden land. This approach not only provides a sustainable food source for livestock but also optimizes the utilization of available space. Additionally, the livestock manure serves as a valuable organic fertilizer for durian plants, creating a closed-loop system that reduces waste and enhances overall farm productivity (Das, A. 2016)

The use of manure or organic fertilizer in this integrated farming system offers multiple benefits. It gradually improves soil fertility by enhancing physical, chemical, and biological properties. This slow-release approach to soil enrichment promotes long-term soil health and sustainability. Furthermore, the abundance of organic fertilizer from livestock reduces the financial burden on farmers, as they can rely on this readily available resource instead of purchasing synthetic fertilizers. This program aims to increase farmers' income while simultaneously promoting environmental conservation through sustainable agricultural practices, creating a win-win situation for both the farmers and the ecosystem.

Authors should discuss the results and how they can be interpreted in light of previous studies and the working hypotheses. The findings and their implications should be discussed in the broadest context possible. Future research directions may also be highlighted. The following components should be covered in the discussion: How do your results relate to the original question or objectives outlined in the Introduction section (what/how)? Do you provide interpretation scientifically for each of your results or findings presented (why)? Are your results consistent with what other investigators have reported (what else)? Or are there any differences?

4. CONCLUSION

Overall, the community services approach to strengthening Criwik's local economy through durian seedling cultivation proved successful. By integrating education, community engagement, and sustainability, this initiative not only bolstered economic outcomes but also enriched social cohesion and cultural identity within the community. Future efforts should continue to build on these foundations, promoting further economic resilience and sustainable agricultural practices. The community services approach in Criwik demonstrated the power of holistic, locally driven economic development. By focusing on durian seedling cultivation, the initiative leveraged the region's agricultural heritage while introducing modern,

sustainable practices. The educational component equipped local farmers with new skills and knowledge, thereby enhancing their ability to optimize crop yields and manage resources effectively. Community engagement fostered a sense of collective ownership and pride in the project, encouraging widespread participation and ensuring its long-term viability.

The success of this initiative extended beyond mere economic gains. It strengthened social bonds within the community as residents worked together towards a common goal. The project also helped preserve and celebrate Criwik's cultural identity, with durian cultivation serving as a tangible link to local traditions and culinary heritage. This multifaceted approach created a ripple effect, potentially inspiring similar community-driven projects in other sectors. Moving forward, the challenge will be to maintain this momentum, continually adapting to changing environmental and market conditions while preserving the core principles of sustainability and community empowerment that made the initial effort so successful.

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