

Enhancing Agricultural Productivity Through Tamkin Principles: A Case Study of Muallaf Dayak Meratus in Papagaran Patikalain Village

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Abstract: Productivity among the Dayak Meratus converts to Islam in South Kalimantan, Indonesia, was a significant issue. The community encountered unique challenges following their conversion, resulting in substantial social, cultural, and economic alterations. In the contemporary era, their subsistence farming practices required modern techniques and approaches to ameliorate their welfare. This study employed a qualitative case study method utilizing Focus Group Discussions and SWOT analysis. The findings revealed that strengths such as traditional knowledge and local culture served as a robust foundation while addressing weaknesses and capitalizing on opportunities, such as the increasing demand for organic products and support from governmental and non-governmental organizations, were deemed imperative. The Tamkin Principles significantly impacted the agricultural productivity of the Meratus Dayak Muslims. By integrating values such as tolerance, acceptance, benefit, justice, expediency, and support, these principles provided a framework that aligned well with the local cultural context.

Keywords: Enhancing Agricultural Productivity Strategy, Tamkin Principle, Swot Analysis, Muallaf, Dayak Meratus, Papagaran Patikalain Village, Hantakan Subdistrict.

1 Introduction

The agricultural sector is a cornerstone of Indonesia's economy, providing millions of citizens with food, employment, and income. South Kalimantan, in particular, showcases agriculture's critical role in driving economic growth and community welfare. However, this sector faces numerous challenges, including fluctuating commodity prices, climate change impacts, and barriers to market access. Among the communities in this region, the Dayak Meratus Muslim converts face unique challenges that complicate their agricultural endeavors. These individuals, originally from the Dayak Meratus tribe, have embraced Islam, leading to significant social, cultural, and economic shifts. Despite these transformations, agriculture remains their primary livelihood, making the need for effective productivity strategies all the more pressing[1].

The Tamkin principle (Tanzim al-Maliyah Khilaf al-Nizam) offers a promising framework to address these challenges. This principle emphasizes resource and asset management rooted in Islamic values, integrating ethics, justice, and humanity into economic strategies. The Tamkin Principle's components, Tolerance, Acceptability, Benefit, Justice, Expediency, and

Support, provide a holistic approach to development, aiming for sustainable and equitable outcomes. For the Dayak Meratus Muslim converts, this principle could bridge traditional practices with modern agricultural techniques, fostering an environment conducive to increased productivity and community welfare [2].

Tolerance, the first pillar of the Tamkin principle, advocates for cultural sensitivity and inclusivity in agricultural practices. This is particularly relevant for the Dayak Meratus Muslim converts, who balance their traditional Dayak heritage with Islamic teachings. By respecting and incorporating their unique cultural practices into agricultural strategies, it becomes possible to enhance community engagement and acceptance of new methods [3].

Acceptability focuses on ensuring that agricultural interventions are well-received by the community. This involves tailoring techniques and technologies to align with the local context and values of the Dayak Meratus Muslim converts. Such an approach can mitigate resistance and facilitate smoother transitions to more productive agricultural practices [4].

Benefit highlights the importance of tangible gains for the community. Strategies must prioritize improving yields, income, and overall livelihoods of the Dayak Meratus Muslim converts. By demonstrating clear benefits, these strategies can encourage wider adoption and sustained implementation [5].

Justice, another core component, ensures fairness in the distribution of resources and benefits. For the Dayak Meratus Muslim converts, this means equitable access to agricultural inputs, training, and market opportunities. Addressing disparities and promoting social equity can strengthen community cohesion and collective progress [6].

Expediency emphasizes timely and effective actions to address agricultural challenges. In the context of South Kalimantan, this could involve deploying quick-win solutions such as improved seed varieties, efficient irrigation systems, and pest management techniques that can rapidly enhance productivity [7]. Support underlines the necessity of continuous assistance from various stakeholders, including government agencies, NGOs, and religious institutions. For the Dayak Meratus Muslim converts, this support can manifest through capacity-building programs, financial services, and market linkages that empower them to sustain and scale their agricultural activities.

Incorporating the Tamkin principle into agricultural strategies for the Dayak Meratus Muslim converts involves a multi-faceted approach. Firstly, engaging the community through participatory planning ensures that interventions are culturally appropriate and widely accepted. Secondly, leveraging local knowledge and traditional practices can enhance the relevance and effectiveness of introduced techniques [8].

Moreover, providing training and resources tailored to the community's specific needs can build their capacity to adopt and sustain improved agricultural practices. This includes education on sustainable farming, financial literacy, and market access, which are critical for long-term success.

Finally, fostering partnerships between the Dayak Meratus Muslim converts and various stakeholders can create a supportive ecosystem for agricultural development. Government policies that prioritize rural development and support from NGOs and private sector initiatives

can provide the necessary infrastructure, resources, and market opportunities to boost productivity and enhance livelihoods.

In conclusion, the Tamkin principle offers a comprehensive and culturally sensitive framework to increase agricultural productivity among the Dayak Meratus Muslim converts in South Kalimantan. By addressing the unique challenges and leveraging the community's strengths, this approach can contribute to sustainable development, food security, and improved welfare for these communities. Implementing these strategies effectively requires a collaborative effort that respects cultural values, promotes equity, and delivers tangible benefits [3].

2 Methods

The research was carried out in January 2022 – May 2023. This research was in Papagaran Patikalain Hamlet, which is administratively located in Papagaran Patikalain Village, Hantakan subdistrict, Hulu Sungai Tengah Regency, South Kalimantan Province, which is located in a valley area in the Meratus mountains [9].

This research uses a case study method with a qualitative approach, supported by focus group discussion techniques. (FGD) This approach is very appropriate for finding a strategy to increase the agricultural productivity of Dayak Meratus converts in South Kalimantan through the Tamkin principle. The data used in this research includes primary data obtained in the field and the results of interviews with sources or respondents [10].

The determination of respondents was based on a purposive sampling technique by taking into account Indigenous society or traditional society in the modern tradition, which is defined as a society that is considered to have an authentic life and taking into account the unique characteristics of the Dayak Meratus Dayak community who are converted to Islam. So, we get respondents represented by one person for each component of the respondents [7].

1. Head of the Meratus Dayak Traditional Elder who converted to Islam
2. Village Head or representative in charge of development
3. Chairman of the Farmer Group
4. Field Agricultural Extension (PPL)
5. Village Assistant

This research uses a SWOT analysis tool where analyzing strengths, weaknesses, opportunities, and threats (SWOT) can help researchers identify internal and external factors that can influence the Meratus Dayak Muallaf agricultural group. Furthermore, this analytical tool will help formulate strategies that suit existing conditions. SWOT analysis indicates various factors in an orderly and logistical manner to formulate a productivity strategy. This analysis is based on logic that maximizes strengths and opportunities but simultaneously minimizes weaknesses and threats.

SWOT analysis is identifying various factors systematically to formulate research strategies. This analysis is based on logic that can maximize strengths and opportunities while minimizing

weaknesses and threats. If appropriately used, SWOT analysis is also a powerful analytical instrument [11].

This research uses a qualitative approach with a case study method. Data was collected through in-depth interviews with members of the Meratus Dayak Muslim Muslim community who were involved in agricultural activities. Field observations were also carried out to understand the implementation of TAMKIN principles in daily agricultural practices.

3 Results and Discussion

3.1 Result

The Tamkinn principle is an abbreviation of "Integration of Religion, Society, Culture, Information and Technology." This concept aims to create harmony and prosperity in society by integrating these important elements. The Tamkin principle can have a strong relationship with increasing agricultural productivity. The following is how the Tamkin principles relate to strategies for increasing agricultural productivity:

3.1.1 Integration of Religion

Religion has a significant role in the culture and values of certain communities. Understanding and integrating religious values in your agricultural strategy can motivate farmers and communities to adopt practices consistent with their beliefs. For example, modern farm technology can be adapted to local religious values to support sustainable plant growth[12].

3.1.2 Community

Collaboration and involvement of local communities are key to increasing agricultural productivity. The Tamkin principle encourages cooperation between community members in various aspects of life, including agriculture. Through collaboration and mutual support, farmers can learn from each other's experiences, share resources, and solve problems together [13].

3.1.3 Culture

Culture is an integral part of the identity of a community. Strategies to increase agricultural productivity that respect and understand local culture will be more accepted by society. This could mean integrating traditional techniques or local knowledge with modern innovations [14].

3.1.4 Information

Access to accurate and relevant information is important in increasing agricultural productivity. The Tamkin principles include an information aspect, which can help provide training and education on the latest agricultural practices. Information technology can also be used to disseminate agricultural information more efficiently [15].

3.1.5 Technology

Modern agricultural technology and technological innovation play a big role in increasing productivity. The Tamkin principle encourages the integration of technology that is appropriate to the cultural context and religious values. The use of this technology can increase efficiency, productivity, and demand in agriculture [16].

a. Strength (Strength)

At the SWOT analysis stage, identify the strengths possessed by the Meratus Dayak Muallaf farmer group in the agricultural context in South Kalimantan. These strengths can be internal resources, capabilities, or positive factors that can provide competitive advantages. Researchers found that the Meratus Dayak Muslim Convert Farmers Group has strength in local knowledge about community-based agriculture, which has been passed down from generation to generation. These strengths create a strong foundation for sustainable agricultural development, taking into account local culture and values. In addition, they have access to fertile agricultural land and the potential to diversify agricultural production.

b. Weakness (Weakness)

Identify internal factors that can become obstacles to achieving optimal agricultural productivity. This can be limited resources, lack of capability, or negative factors that hinder progress. The research location found that the lack of access to modern technology and progressive agricultural training was one of the weaknesses of the Meratus Dayak Muslim convert group. In addition, lack of funding and limited access to markets means that their agricultural potential has not been fully realized [17].

c. Opportunity (Opportunity)

Identify external opportunities that can be utilized by the Dayak Meratus Converted Farmers Group to increase their agricultural productivity. These opportunities could be market changes, policy changes, or trends that support sustainable agriculture.

Changes that must be introduced to the community and Muslim convert farmer groups in Papagaran village include training on community consumption patterns, which is expected to increasingly support organic and local agricultural products and be able to provide opportunities for the Dayak Meratus Convert Day farmer group to develop organic production and direct marketing to consumers. Additionally, opportunities for government agencies or non-governmental organizations to provide modern training and funding can help overcome technology and funding deficiencies.

d. Threats

Identify external threats that could hamper the agricultural growth of the Meratus Dayak Muslim Muallaf group. These threats can take the form of climate change, natural disasters, and changes in commodity prices.

Table 1. SWOT Matrix Strategy for Increasing Agricultural Productivity of Dayak Meratus Converts to Chili Hamlet, Papagaran Patikalain Village Hantakan subdistrict

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Traditional knowledge of sustainable agriculture 2. Local cultural assets as unique 3. Large suburban land ownership 	<ol style="list-style-type: none"> 1. Limited access to modern technology 2. Lack of skills in commercial agricultural management 3. Limited funding for agricultural development
Opportunities	Threats
<ol style="list-style-type: none"> 1. Market demand for organic agricultural products 2. Support from government and non-government organizations in training and funding 3. Opportunities to develop partnerships with local markets 	<ol style="list-style-type: none"> 1. Fluctuations in agricultural commodity prices 2. Unpredictable changes in weather patterns (natural disasters) 3. Competition from other agricultural producers

Each quadrant in the SWOT matrix above represents one aspect of the SWOT analysis. Each quote or finding from the interview can be placed in the most appropriate quadrant based on its nature. For example, quotes about traditional knowledge and local cultural assets can be placed in the Strengths quadrant. Likewise, findings about technological limitations and lack of skills can fall into the Weakness quadrant [18].

3.2 Discussion

3.2.1 Strengths

a. Traditional Knowledge and Local Culture

The majority of respondents emphasized the importance of traditional knowledge in agriculture that has been passed down from their ancestors. "We know how to grow crops according to the season and suitable soil type because that is part of our culture," said Mr Sekur. According to several respondents, this knowledge is a unique strength that can provide an advantage in designing agricultural strategies.

b. Obstacles to Agricultural Technology and Education

Some respondents, especially those with limited education in agriculture, acknowledged challenges in accessing modern technology. Ms Alil said, "We wanted to take advantage of technology, but some of the new tools and techniques were difficult for those of us who did not have special training." Several respondents also mentioned the need for broader and more accessible agricultural education training.

c. Market Opportunities for Organic Farming

Some respondents, such as Mrs. Rina Hasanah, saw a big opportunity in market demand for organic agricultural products. "A lot of people are looking for organic products now, and we

have fertile land to tap into," he said. This opportunity is seen as an entry point to increase income and expand the market.

d. Climate Threats and Commodity Prices

Some farmers, like Pak Gandursyah, identify threats from unpredictable changes in weather patterns. "The unstable weather makes it difficult for us to plan crops properly," he said. Apart from that, fluctuations in agricultural commodity prices are also seen as a threat that can affect income stability.

e. Expectations of Support and Partnership

The Meratus Dayak Muslim Convert Farmers Group in South Kalimantan faces unique challenges and opportunities as they seek to enhance their agricultural productivity. Their situation reflects a broader trend seen in many indigenous and rural communities where traditional knowledge intersects with modern agricultural practices. This discussion will explore these dimensions in greater detail, focusing on their internal strengths, weaknesses, external opportunities, and threats and how these factors can inform sustainable agricultural strategies [19].

3.2.2 Internal Strengths

Traditional Knowledge: The Meratus Dayak Muslim Convert Farmers Group possesses a rich repository of traditional agricultural knowledge. This knowledge includes sustainable farming practices such as crop rotation, intercropping, and natural pest management, honed over generations. Such practices are crucial for maintaining soil health and ensuring long-term agricultural productivity.

Fertile Land: The community has access to fertile and extensive agricultural land. This resource is a significant asset for cultivating a diverse crop range. Diversification can mitigate market and climate fluctuations risks, enhancing food security and economic stability [20].

3.2.3 Internal Weaknesses

Limited Access to Modern Technology: One of the primary challenges is restricted access to modern agricultural technology. This limitation affects productivity and efficiency, as traditional tools and methods may not match the yield potential of modern techniques .

Lack of Training and Skills: There is a notable gap in commercial farming and financial management skills. Effective agricultural management requires knowledge of market trends, financial planning, and modern agricultural practices. Without this, the community struggles to maximize its agricultural potential.

Financial Constraints: The lack of sufficient funding limits the ability to invest in necessary improvements such as irrigation systems, quality seeds, and fertilizers. Financial constraints also hinder the adoption of new technologies that could enhance productivity[19].

3.2.4 External Opportunities

Increasing Demand for Organic Products: There is growing demand for organic and locally produced agricultural products. This trend presents a significant opportunity for the community

to market their produce as organic, potentially fetching higher prices and opening new market avenues.

Support from Organizations: Government and non-governmental organizations often offer support through training, funding, and technological assistance. Such support can help bridge the gap in technology and skills, providing the community with the tools they need to improve productivity.

Partnerships with Local Markets: Establishing partnerships with local markets can provide a steady outlet for their produce, ensuring a reliable income stream and reducing the dependency on fluctuating external markets. This local focus can also strengthen community ties and promote local economic development [21].

3.2.5 External Threats

Commodity Price Fluctuations: Agricultural commodity prices are notoriously volatile. Price fluctuations can severely impact the community's income and profitability, making financial planning and stability difficult.

Climate Change and Weather Variability: Unpredictable weather patterns and extreme weather events pose significant threats to agricultural productivity. These changes can lead to crop failures, reduced yields, and increased susceptibility to pests and diseases.

Competition from Other Producers: The community faces competition from other agricultural producers who may have better access to technology and markets. This competition can limit market share and reduce the profitability of their agricultural activities [22].

3.2.6 Strategic Recommendations

Integrating Traditional and Modern Practices: Combining traditional agricultural knowledge with modern technologies can optimize productivity. For example, introducing improved seed varieties and efficient irrigation systems while maintaining traditional soil conservation practices can lead to better yields and sustainability [23].

Training and Capacity Building: Providing targeted training programs in modern agricultural techniques, financial management, and market analysis can empower the community. These programs should be culturally sensitive and designed to build on existing knowledge and practices .

Access to Financial Services: Facilitating access to microfinance and other financial services can help farmers invest in necessary improvements. Financial support could also come in subsidies or grants to promote sustainable agricultural practices [24].

Developing Infrastructure: Investing in agricultural infrastructure such as storage facilities, transportation, and irrigation systems can reduce post-harvest losses and improve market access. This infrastructure supports a sustainable and resilient agricultural system [25].

Leveraging Market Opportunities: The community should actively seek to capitalize on the growing demand for organic products. Branding their produce as organic and establishing certification can open new market opportunities and command premium prices .

Building Resilience to Climate Change: Implementing climate-smart agriculture practices can enhance resilience to weather variability. Practices such as drought-resistant crops, rainwater harvesting, and agroforestry can mitigate the impacts of climate change .

Forming Cooperatives: Encouraging the formation of cooperatives can strengthen bargaining power, reduce costs through shared resources, and improve market access. Cooperatives can also facilitate knowledge sharing and collective action in addressing common challenges .

Engaging in policy advocacy to secure more substantial support from the government can address systemic challenges. Policies that provide subsidies, protect against market fluctuations, and support sustainable practices can significantly impact the community's productivity and stability [26].

Establishing robust monitoring and evaluation frameworks can help track the effectiveness of implemented strategies and make necessary adjustments. Continuous learning and adaptation are key to long-term success in improving agricultural productivity.

Conclusion

The Meratus Dayak Muslim Convert Farmers Group has significant potential to enhance their agricultural productivity through a combination of leveraging internal strengths and addressing weaknesses while capitalizing on external opportunities and mitigating threats. The community can achieve sustainable agricultural development by adopting a holistic approach that integrates traditional knowledge with modern practices and receiving adequate support from various stakeholders. This multifaceted strategy aims to improve productivity and ensure the community's long-term resilience and economic stability.

Applying the Tamkin Principles has notably positively impacted the agricultural productivity of the Meratus Dayak Muslim community in South Kalimantan. Integrating values such as tolerance, acceptability, benefit, justice, expediency, and support has provided a framework that aligns well with the community's cultural and religious context. This alignment has facilitated the acceptance and implementation of new agricultural practices, leading to increased productivity and improved livelihoods.

References

- [1] H. C. J. Garnett, T., Appleby, M. C., Balmford, A., Bateman, I. J., Benton, T. G., Bloomer, P., & Godfray, "Sustainable Intensification in Agriculture: Premises and Policies," *Sci. Sustain. Intensif. Agric. premises policie*, vol. 341, pp. 33–34, 2018.
- [2] R. Altieri, M. A., Nicholls, C. I., & Montalba, "Technological Approaches to Sustainable Agriculture at a Crossroads: An Agroecological Perspective," *Sustainability*, p. 349., 2017.
- [3] D. A. M. Ash-Shallabi, *FIQIH TAMKIN ; Panduan Meraih Kemenangan Dan Kejayaan Islam*. Jakarta Timur: Pustaka Al-Kautsar. [Online]. Available: //www.kautsar.co.id
- [4] dan C. J. Alison Blay-Palmer, Rachel Carey, *Sustainable Food System Assessment*. 2022.

- [5] M. H. W. dan S. T. Lovell, "Agroforestry—The Next Step in Sustainable and Resilient Agriculture," *researchgate*, p. 574, 2022, doi: 10.3390/su8060574.
- [6] V. K. Verma dan H. B. Singh (2020), *Organic Farming For Sustainable Agriculture: A Review*. 2020.
- [7] A. Daud, *Islam dan Masyarakat Banjar-deskripsi dan analisa kebudayaan Banjar*. Jakarta: PT. Raja Grafindo Persada, 1997.
- [8] J. Pretty, "Agricultural sustainability: concepts, principles, and evidence," *Philos. Trans. R. Soc. B Biol. Sci.* 363(1491), pp. 447-465., 2008.
- [9] C. Namugenyi, S. L. Nimmagadda, and T. Reiners, "Desain Model Analisis SWOT dan Evaluasinya dalam Konteks Ekosistem Bisnis Digital yang Beragam," *sciencedirect*, vol. 159, pp. 1145–1154, 2019.
- [10] A. Kumar, *Sustainable Agriculture: Advances in Plant Metabolome and Microbiome*. Academic Press, 2021.
- [11] Meftahudin, 1), A. P. 2), and Ratna Wijayanti 3, "Penerapan Analisis SWOT dan Five Forces Porter Sebagai Landasan untuk Merumuskan Strategi Pemasaran dalam Meningkatkan Laba Perusahaan (Studi Pada Tin Panda Collection di Kabupaten Magelang)," *J. Econ. Manag. Account. Technol.*, vol. Vol. 1, 2018, doi: <https://doi.org/10.32500/jematech.v1i1.209>.
- [12] M. Nordin, *Migration , religion och integration*, 17th ed. Stockholm 2023, 2023. [Online]. Available: ju.delmi@regeringskansliet.se
- [13] H. S. and M. W. Van Bodegom, Arend Jan, *Forests and Climate Change: adaptation and mitigation*, I s s u e., no. 50. Digigrafi, wageningen, The netherlands: EuropEan Tropical ForEsT rEsEarch nETwork, 2009.
- [14] S. Edition, *Culture*. London And New York: Taylor And Francis Group.
- [15] Natalie E. Tennant, *Best Practices Guide To Municipal Elections*, 3rd ed., vol. 01. West Virginia, 2016.
- [16] C. Raulin, B. Greve, and H. Grema, "IPL technology: A review," *Lasers Surg. Med.*, vol. 32, no. 2, pp. 78–87, 2003, doi: 10.1002/lsm.10145.
- [17] Y. Rosenzweig, C., Mbow, C., Barioni, L. G., Benton, T. G., Herrero, M., Krishnapillai, M., ... & Xu, "Climate change responses benefit from a global food system approach," *Clim. Chang. responses benefit from a Glob. food Syst. approach. Nat. Food*, vol. 1, pp. 94–97, 2020.
- [18] C. Namugenyi, S. L. Nimmagadda, and T. Reiners, "Design of a SWOT analysis model and its evaluation in diverse digital business ecosystem contexts," *Procedia Comput. Sci.*, vol. 159, pp. 1145–1154, 2019, doi: 10.1016/j.procs.2019.09.283.
- [19] A. (2005) Humphrey, "'SWOT Analysis for Management Consulting'. SR1 Alumni Newsletter (SRI International)," 2005.
- [20] W. Mardiana, "Perspektif Calon Guru Terhadap Penggunaan Media Digital Dalam Pengajaran Bahasa Inggris," in *Seminar Nasional Penelitian dan Pengabdian Masyarakat -2019*, 2019, pp. 202–206.
- [21] P. Kotler, B. Molan, B. Sarwiji, and K. Lane, *Marketing management*, vol. 4. Jakarta : Indeks, 2009, 2009.
- [22] Dr. James Hansen, *Storms of My Grandchildren: The Truth About the Coming Climate Catastrophe and Our Last Chance to Save Humanity*.
- [23] M. Duru, M., Therond, O., & Fares, "Designing agroecological transitions; A review," *Agron. Sustain. Dev.*, vol. Volume 35, pp. 1237–1257, 2020.
- [24] P. Tittonell, "Ecological intensification of agriculture—sustainable by naturee," *Curr. Opin. Environ. Sustain.*, vol. 8, pp. 53–61, 2014.

[25] L. S. Musianto, "Perbedaan Pendekatan Kuantitatif Dengan Pendekatan Kualitatif Dalam Metode Penelitian," *J. Manaj. dan Wirausaha*, vol. 4, no. 2, pp. 123–136, 2002, doi: 10.9744/jmk.4.2.pp.123-136.

[26] A. B.- Palmer, K. M. Damien Conar é, A. Amanda Di Battista, and C. Johnston, *Sustainable Food System Assessment Lessons from Global Practice*. British Library Cataloguing- in- Publication Data A catalogue record for this book is available from the British Library, 2020.