

## Social Entrepreneurship as a Catalyst for Indigenous Agro-Industrial Transformation

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**Abstract:** Indigenous farming communities in remote rural areas often face structural constraints, including limited market access, weak institutions, and exclusion from modern agro-industrial value chains. While social entrepreneurship has emerged as an alternative development approach, empirical evidence on its transformative role within the indigenous agro-industry remains limited. This study examines how social entrepreneurship acts as a catalyst for agro-industrial transformation and community empowerment among indigenous farmers in Merauke, Eastern Indonesia. Using a qualitative exploratory case study design, data were collected through in-depth interviews, participant observation, and document analysis involving indigenous farmers, cooperatives, local social enterprises, and government stakeholders. The findings reveal that social entrepreneurship enables the creation of shared social and economic value through community-based agro-industrial models, eco-cultural product branding, and integrated indigenous cooperatives. These models strengthen farmers' economic autonomy, enhance social participation, strengthen indigenous institutions, and promote sustainable value chains. Moreover, the study demonstrates that embedding cultural values and collective governance within agro-industrial innovation increases resilience and long-term sustainability. This research contributes to social entrepreneurship and rural development literature by integrating empowerment theory into agro-industrial transformation in an indigenous context. The findings offer important policy implications for inclusive rural development, indigenous empowerment, and sustainable agri-industry in peripheral regions.

**Keywords:** Social Entrepreneurship; Indigenous Empowerment; Agro-Industrial Transformation; Indigenous Farming; Economic Changes; Rural Areas; Peripheral Regions; Social Participation.

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### 1. Introduction

Social and economic changes in rural areas, particularly in indigenous communities, have become a global focus as part of efforts to achieve inclusive and sustainable development. In many countries, smallholder farmers and indigenous communities face structural challenges, including limited market access, limited capital, limited access to technology, and dependence on informal supply chains [1]. In the Indonesian context, social entrepreneurship initiatives have emerged as an effective strategy to strengthen farmers' economic capacity and local sovereignty. Despite the enormous potential of social entrepreneurship, academic and practical gaps hinder its widespread implementation in indigenous communities, such as in Merauke. Much of

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the literature focuses on social entrepreneurship in rural areas or in marginalised communities. Still, research specifically exploring agri-industrial transformation rooted in local, customary values and traditional wisdom remains limited. Case studies of farmer empowerment in remote areas have demonstrated barriers to accessing capital, weak institutional frameworks, and inequitable benefit-sharing mechanisms [20]. Research findings indicate that social entrepreneurship that takes into account cultural identity and local knowledge can accelerate the entrepreneurial process and remains relatively rare in peripheral areas, which are located on the outskirts and often experience slower development [22]. The urgency to bridge this gap is enormous, because without contextual understanding and sustainable models, social entrepreneurship programs risk being unsustainable or even eroding the cultural richness of indigenous communities, which in the framework of social entrepreneurship theory become the main lens for analyzing innovative business models among indigenous farmers, especially in Merauke Regency as a peripheral area located at the easternmost tip of Indonesia [17].

This approach examines how social mission (“shared value”) and social innovation can be integrated into sustainable economic activities. Furthermore, empowerment theory provides a conceptual framework for exploring how indigenous farmers can gain control over resources, including institutional recognition and appreciation of their local knowledge. The combination of these two theories enables a deeper analysis of the structural transformations that social entrepreneurship may bring about in indigenous communities. Based on this background, this study has the following objectives: (1) to analyze how the principles of social entrepreneurship are applied in the agri-industrial model in the Merauke indigenous farming community, (2) to identify the forms of empowerment that emerge in the economic, social, and institutional aspects of the model, and (3) to formulate an innovative agri-industrial model that is sustainable and sensitive to indigenous values.

The problem formulations that guide this research include: how Merauke indigenous farmers carry out social entrepreneurship practices; what empowerment emerges from these practices; and which contextual agri-industrial model is most appropriate for indigenous communities in this region. The scientific contribution of this article lies in integrating social entrepreneurship studies and empowerment theory within the context of indigenous communities, as well as in formulating an innovative, sustainable agri-industrial model grounded in local wisdom. This study also offers practical insights for policymakers, NGOs, and social organisations in designing empowerment interventions that not only have economic impacts but also strengthen indigenous institutions and local cultural values [8].

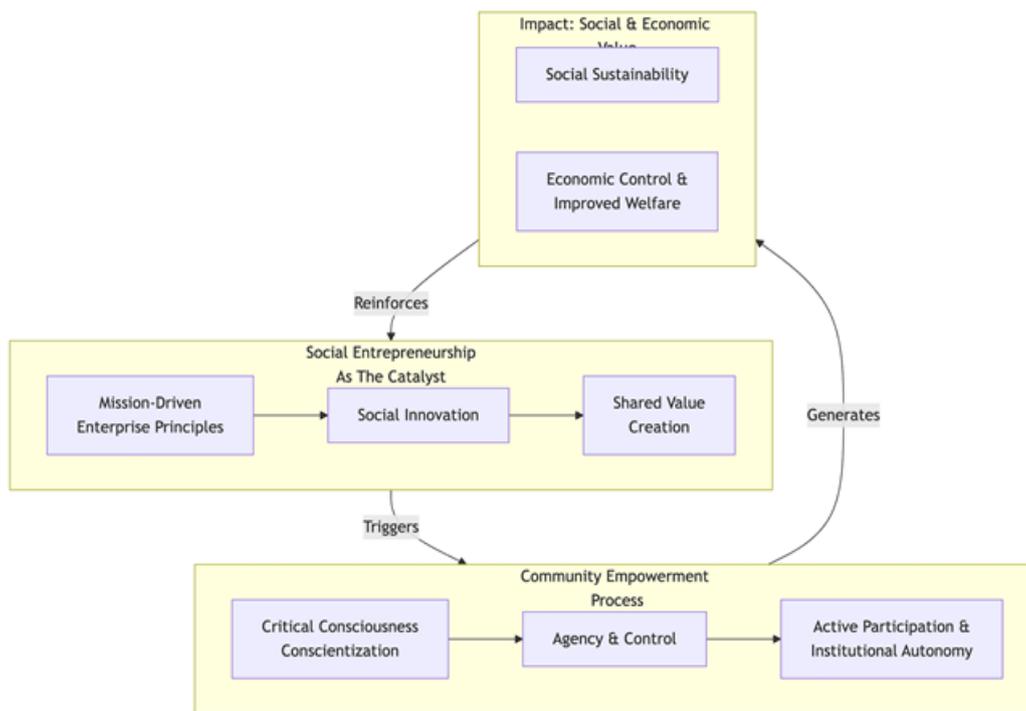
## 2. Literature Review

The main theories underlying this research are Social Entrepreneurship Theory and Empowerment Theory, both of which complement each other in explaining the relationship between social innovation and the economic empowerment of indigenous communities. Social Entrepreneurship Theory is rooted in the concept of shared value creation, where social entrepreneurs pursue not only economic profit but also significant social impact. This theory emphasises the integration of social innovation, organisational sustainability, and a clear social mission as key to the success of social initiatives in the agricultural sector.

Meanwhile, Empowerment Theory, developed by Julian Rappaport and Paulo Freire, highlights the importance of community control over resources and decision-making processes. In the context of indigenous agriculture, this theory is relevant in explaining how empowerment processes can transform power relations and increase local farmers' capacity to actively participate in the agribusiness value chain [15]. The integration of these two theories creates a comprehensive analytical framework for understanding the social, economic, and institutional dynamics of the social entrepreneurship-based agri-industrial model in Merauke.

Previous studies have shown that social entrepreneurship has been effective in strengthening economic empowerment for marginalised communities and increasing the sustainability of agricultural systems. Research by Olmedo et al. [16] found that a community-based social entrepreneurship model in Finland successfully increased the income of smallholder farmers through supply chain innovation and product diversification [23]. He explained that initiatives such as social agripreneurship have yielded positive results in addressing market gaps and building rural economic resilience. Furthermore, integrating social entrepreneurship with agricultural technology innovation has been shown to increase production efficiency and expand market access for farmers in remote areas.

Agma [5], most of which research focuses on the context of non-indigenous communities and has not fully integrated cultural dimensions and local values in its analysis. A research gap arises when the existing literature fails to thoroughly examine how social entrepreneurship principles are applied within indigenous communities with distinct social structures and cultural values. Studies on indigenous community empowerment often focus on the normative or project-based approach, ignoring the internal community dynamics that determine the sustainability of social enterprise models [13]. Furthermore, there are still limited studies linking Empowerment Theory with Social Entrepreneurship in the agribusiness context, particularly in eastern Indonesia, such as Papua (Figure 1).



**Figure 1:** The theoretical relationship between social entrepreneurship and empowerment theory

This gap is crucial to bridge so that agricultural development strategies focus not only on increasing production but also on strengthening community independence and control over their resources. This research aims to address this gap by examining how a social entrepreneurship model can empower indigenous farmers in Merauke through agri-industrial innovations aligned with local values. This approach emphasises not only economic aspects but also the social and institutional dimensions that shape community capacity, making a novel contribution to the social entrepreneurship literature by presenting a local-indigenous perspective that has previously been under-recognised [10]. In addition, integrating empowerment theory into the context of indigenous agribusiness provides a more holistic understanding of how social transformation can occur through participatory, equitable entrepreneurial practices. From a methodological perspective, the trend in previous studies has been a shift from quantitative analyses of economic impacts to qualitative approaches that emphasise contextual understanding and community participation [3]. The case study approach is now widely used to explore social dynamics in social organisations and sustainable agricultural models, including in the context of community-based enterprises [2].

Another trend is the growing attention to hybrid models that combine market and social logic to achieve a balance between profit and social mission [6]. By following this direction, research on indigenous farmers in Merauke is expected to enrich the global discourse on how social entrepreneurship can be adapted to communities with unique social structures and high dependence on local resources. Based on the theoretical analysis above, it can be concluded that social entrepreneurship serves as a crucial mechanism for strengthening the economic and institutional capacity of indigenous communities. In contrast, empowerment serves as both a goal and an indicator of the initiative's success. Both are reciprocally related: the higher the level of empowerment, the more sustainable the social entrepreneurship model. Therefore, this study positions itself at the intersection of these two theoretical streams to develop a conceptual model of an innovative agri-industry in Merauke, rooted in the social, cultural, and economic values of indigenous communities.

### 3. Research Methods

This research uses a qualitative, exploratory case study design to focus on an in-depth understanding of the dynamics of social entrepreneurship in empowering indigenous farmers through an agri-industrial model in Merauke Regency. A qualitative approach was chosen because it can explore participants' meanings, perceptions, and subjective experiences within a specific social and cultural context. A case study design is used to deeply explore complex phenomena occurring in the real world, especially when the boundaries between the phenomenon and its context are unclear. This approach allows researchers to examine in detail the relationship between social entrepreneurship practices and empowerment processes within the context of unique and diverse indigenous communities. The data sources in this study consist of primary and secondary data. Primary data

were obtained through in-depth interviews, participant observation, and focus group discussions with stakeholders, including indigenous farmers, managers of local social institutions, and local government officials involved in agricultural sector development and community empowerment. Secondary data included regional policy documents, social entrepreneurship program reports, and relevant scientific publications on social entrepreneurship, indigenous community empowerment, and agri-industrial models in eastern Indonesia. A source triangulation approach was applied to increase data validity by comparing information from various complementary sources.

Data collection was carried out through several systematic stages. First, researchers mapped key actors involved in the social-based agri-industrial ecosystem in Merauke. Second, in-depth interviews were conducted using a semi-structured interview guide to allow flexibility in gathering information tailored to each participant's context [11]. Third, participant observation was conducted at agricultural production sites, training sites, and community centres to understand the actual practices of social entrepreneurship in the field. Fourth, relevant documents were analysed to gain a comprehensive understanding of local policies and economic dynamics. The entire data collection process was carried out over four months, ensuring adherence to ethical research principles, including informed consent, participant confidentiality, and non-maleficence [21]. The inclusion criteria for this study included individuals or groups who: (1) are part of the indigenous community in Merauke; (2) are actively involved in local agricultural or agri-industrial activities; and (3) have direct experience in social entrepreneurship initiatives or community empowerment programs. Meanwhile, the exclusion criteria included external actors who do not interact directly with the local community or social entrepreneurship projects. Participants were selected using a purposive sampling technique to ensure representation of key actors across the indigenous community's socio-economic system. A total of 20 participants were interviewed, including 12 indigenous farmers, three social organisation managers, and five local government officials.

The unit of analysis in this study is the Merauke indigenous farming community, which engages in agri-industrial activities through social entrepreneurship. This unit was chosen because it reflects the interaction between the local economic system and social innovation grounded in cultural values. The researchers seek to understand the socio-economic transformation process enabled by social entrepreneurship, including how customary values and community norms shape social business practices. The analysis focuses not only on economic outcomes but also on social change, perceptions of empowerment, and the formation of collective identity within agri-industrial activities. The data analysis technique used was thematic analysis, which allows researchers to identify patterns, themes, and meaningful relationships within qualitative data. The analysis process included six main stages: data familiarisation, initial coding, theme discovery, theme review, theme naming, and final report preparation. Data management and coding were carried out using NVivo 12 Plus to facilitate classification and the analysis of relationships between themes. The analysis results were maintained through member checking and peer debriefing to ensure the validity of interpretations and reduce researcher bias [7]. This analytical approach was chosen because it aligns with the research objective of building a deep contextual understanding of the relationship between social entrepreneurship and the empowerment of indigenous farmers in Merauke.

## **4. Findings and Discussion**

This section integrates field research findings with a theoretical framework to examine how social entrepreneurship empowers indigenous farmers in Merauke Regency. Through in-depth interviews, participant observation, and documentation, this study uncovers the complex interactions between the social mission, cultural values, and economic strategies of indigenous communities. Empirical findings are integrated with key theories such as the Empowerment Theory [9], Social Capital Theory and the Sustainable Livelihood Framework, which together explain the socio-economic dynamics behind the emergence of social entrepreneurship-based agri-industrial models [19].

### **4.1. Integrating Social Mission and Economic Logic**

Field findings indicate that the implementation of social entrepreneurship in Merauke is not merely an economic tool but also a social instrument that balances community welfare goals with business sustainability. Most social initiatives in this region are rooted in local institutions such as farmer cooperatives, Village-Owned Enterprises (BUMKam), and church-based social organisations. These institutions play a dual role as economic drivers and social institutions that foster community solidarity [18]. This context describes the practice of a hybrid enterprise, namely the integration of business logic and social logic, as stated by Muhammad [12]. This model emphasises that the success of social entrepreneurship is measured not only by accumulated profits but also by the ability to manage economic resources to strengthen collective social welfare. In practice, cooperatives in Merauke implement a fair profit-sharing scheme between managers and farmers, allocating a portion of profits to social activities such as training, educational assistance, and support for traditional rituals. The application of these social values aligns with Social Capital Theory, which highlights the importance of networks of trust and norms of reciprocity in strengthening community cohesion. In Merauke, the values of cooperation and customary deliberation serve as forms of social capital that maintain the institutional legitimacy of social enterprises. Collective practices such as working together during harvests, managing cooperative funds, and joint investments are tangible manifestations of bonding social capital that

strengthen internal group trust. Furthermore, social innovation is also a crucial characteristic in maintaining business sustainability. Emerging innovations such as simple drying machines, locally sourced packaging, and indigenous identity-based marketing strategies embody the concept of frugal innovation, which is appropriate for limited-resource contexts and oriented toward local added value [14]. Through this approach, indigenous farmers not only increase production efficiency but also strengthen the market position of local products by highlighting cultural and ecological elements. The implementation of a social mission combined with economic innovation demonstrates a paradigm shift from subsistence agriculture to a values-oriented agri-industry. Social entrepreneurship serves as an adaptive mechanism for socio-economic change, integrating traditional values with modern entrepreneurial principles. Thus, this model emphasises that social entrepreneurship is an arena where economic and social interests are not mutually exclusive, but rather mutually reinforcing, creating sustainable community impact.

#### **4.2. Empowerment Dynamics in Indigenous Farming Communities**

Further findings indicate that the empowerment of indigenous farmers in Merauke occurs across three main dimensions: economic, social, and institutional. The economic dimension is evident in farmers' increased ability to manage household and business finances independently. Along with the strengthening of simple digital marketing networks such as WhatsApp Business and Papua Mart, farmers now have direct access to local and regional markets without intermediaries. Their incomes have increased by an average of 25–40% over the past two years, following the collective ownership of production tools. This dynamic can be explained through Empowerment Theory, which emphasises empowerment as a multidimensional process involving individual control, community participation, and structural change. In this context, increased economic capacity reflects the psychological dimension of empowerment—when farmers feel able to control resources and make independent economic decisions. Their courage to negotiate prices, determine production strategies, and use new technologies indicates a high level of self-confidence and self-efficacy. In the social dimension, significant changes are evident in the increased participation, solidarity, and critical awareness of farmers. They are now more active in expressing their opinions in deliberations, participating in collective decisions, and initiating joint activities without waiting for external intervention.

This process aligns with the concept of conscientization introduced by Agma [5], which is the growth of critical awareness of structures of inequality and the emergence of initiatives to bring about change through collaboration. The integration of cooperation values and customary norms into new institutional mechanisms strengthens inclusive social structures. Meanwhile, the institutional dimension demonstrates the formation of independent organisational structures at the community level. Some farmer groups have adopted a rotational leadership system to ensure equal roles and opportunities. A customary consent mechanism is implemented before any economic activity begins, demonstrating the synergy between traditional values and modern entrepreneurial principles. From a Social Capital Theory perspective, this practice strengthens bridging social capital, namely, cross-group networks that enable collaboration between indigenous communities, church institutions, and supporting organisations [24]. The interconnectedness of these dimensions of empowerment demonstrates that social entrepreneurship not only improves economic well-being but also fosters collective capacity and strengthens social cohesion. Within the Sustainable Livelihood Framework, this reflects efforts to expand livelihood assets, including human, social, and financial capital that support the sustainability of indigenous communities. In other words, empowerment through social entrepreneurship creates new pathways to economic independence and revitalises cultural identity.

#### **4.3. Cultural Sustainability and Innovative Agri-Industry Models**

Field findings indicate that social entrepreneurship practices in Merauke have evolved into innovative agri-industrial forms rooted in cultural values and sustainability principles. Three main forms that have emerged are: community-based agri-enterprise, eco-cultural agri-branding, and an integrated cooperative model. The community-based agri-enterprise model emphasises collaboration among indigenous farmers, non-governmental organisations, and market players within a sustainable production ecosystem, combining economic efficiency with local wisdom. Meanwhile, eco-cultural agri-branding emphasises traditional identity and ecological sustainability as the main selling points of local products, such as coffee, sago, and red rice, which are packaged with imagery of Merauke's unique culture [4]. These models illustrate the concrete manifestations of integrating social, economic, and ecological values within social entrepreneurship. The Sustainable Livelihood Framework perspective helps explain how business diversification, product innovation, and adaptation to environmental change strengthen community economic sustainability. In this context, sustainability is measured not only by profitability but also by the community's ability to manage resources adaptively and equitably across generations. The integrated cooperative model is the most concrete example of a culturally based social entrepreneurship approach.

These cooperatives serve not only as production platforms but also as centres for social education and learning, where members receive technical training, entrepreneurial mentoring, and access to microfinance. Within the framework of Social Capital Theory, cooperatives serve as institutions that build linking social capital—connecting indigenous communities with external institutions such as local governments, financial institutions, and civil society organisations. The success of cooperatives in

expanding markets to the provincial level, maintaining financial sustainability, and reducing dependence on external grants demonstrates the effectiveness of the hybrid model in bridging traditional values with modern economic mechanisms. Furthermore, adaptation to climate change and market fluctuations demonstrates the community's ability to develop resilient systems through innovations based on local knowledge. Diversification practices, such as processing agricultural waste (sago husks) into craft materials, demonstrate both ecological awareness and a creative economic strategy. These findings reinforce the view that social entrepreneurship in indigenous communities cannot be separated from the surrounding cultural context. Values such as balance with nature, social solidarity, and distributive justice form the ethical foundation for entrepreneurial practices. Thus, the agri-industrial model in Merauke can be understood as an eco-social innovation—oriented toward both ecological sustainability and social transformation.

#### 4.4. Socio-Political Transformation and Collective Agency

Beyond its economic impact, social entrepreneurship in Merauke has also triggered significant social and political transformation. One of the most prominent findings is the emergence of a younger generation of indigenous people actively involved in agri-industry development and the use of modern agricultural technology. This phenomenon demonstrates a paradigm shift from subsistence farming to a socially value-based creative economy. The involvement of young people in digital marketing-based community start-ups strengthens social sustainability by encouraging entrepreneurial regeneration and modernising local production systems without neglecting traditional values. This transformation demonstrates a collective empowerment process that is not only individual but also structural. Within the framework of Empowerment Theory, this dynamic can be categorised as community empowerment, in which community groups develop the capacity to influence policy and determine the direction of development. Social entrepreneurship, in this context, acts as a political learning space, where indigenous farmers gain experience in collective decision-making, economic planning, and policy negotiation. The findings also indicate that indigenous communities' involvement in regional development planning forums is an indicator of increased political agency.

Farmers participating in the social agri-industrial model are now attending policy forums previously reserved for government officials and business actors. This indicates a redistribution of power at the local level, where indigenous communities are no longer positioned as recipients of policy, but rather as active subjects of development. This involvement also demonstrates the emergence of cross-group bridging social capital networks that connect indigenous communities with other institutional actors. In Williams et al. [24], this constitutes crucial social capital that strengthens collective bargaining power and expands a community's social influence. Furthermore, this political transformation demonstrates that social entrepreneurship can function as a civic platform, a space that strengthens citizen participation, expands access to decision-making, and deepens economic democratisation. Thus, social entrepreneurship in Merauke is not only an economic instrument but also a mechanism for socio-political change, fostering a new awareness of the independence, participation, and collective rights of indigenous communities. This model demonstrates that social innovation can serve as a means of economic decolonisation and strengthen local autonomy in the periphery of eastern Indonesia.

#### 4.5. Implications and Theoretical Contributions

The results of this study provide an important contribution to the development of social entrepreneurship theory, particularly in the context of indigenous communities in the periphery of the global south, such as Papua. By integrating empirical findings from Merauke into the frameworks of Empowerment Theory, Social Capital Theory, and the Sustainable Livelihood Framework, this study demonstrates that social entrepreneurship functions not only as an economic strategy but also as a social mechanism for rebuilding power structures, cultural identity, and community independence (Table 1).

**Table 1:** Variable relationships, findings, theoretical contributions, and implications

| Conceptual Variables | Key Findings   | Theoretical Contributions  | Practical Implications  |
|----------------------|--|--|---|
| Empowerment Process  | Empowering indigenous farmers is not only about economic control but also about cultural legitimacy and customary consent. The empowerment process is dialogic and ongoing, reflecting a shift from empowerment as an outcome to empowerment as a process. | Expanding Empowerment Theory by adding cultural and spiritual dimensions to the process of empowering indigenous communities. Conceptualising empowerment as a collective social practice rooted in critical awareness and customary legitimacy. | Community empowerment programs need to be designed in a participatory manner and grounded in local values, rather than solely through economic interventions. Governments and social institutions need to facilitate critical learning and cultural dialogue. |

|  |   |   |   |
|--|---|---|---|
| Social Capital Dynamics                  | Social capital develops through a balance between bonding (internal solidarity) and bridging (external networks). Social entrepreneurship serves as a bridge between customary networks and external institutions, strengthening trust and moral obligation.                    | Expanding Social Capital Theory by adding dimensions of spirituality and communal ethics to the formation of social capital. Proposing the concept of embedded social entrepreneurship embedded in traditional social networks. | The design of social institutions and cooperatives must consider customary mechanisms and communal ethics as a foundation for sustainability. Cross-institutional collaboration must be based on trust and value-based reciprocity. |
| Sustainable Livelihood Strategies        | Indigenous farmers practice economic diversification and cultural preservation through eco-cultural branding and the use of environmentally friendly local materials. Economic resilience is built through collective risk-sharing mechanisms and adaptation to climate change. | Expanding the Sustainable Livelihood Framework by adding dimensions of cultural and symbolic identity as sustainability assets. Proposing a cultural sustainability model as part of a livelihood strategy.                     | Development programs and environmental policies must integrate cultural identity as a productive asset. Encourage eco-cultural entrepreneurship approaches in the sustainable agriculture sector.                                   |
| Indigenous Social Entrepreneurship Model | The social agri-industrial model in Merauke is hybrid, combining social and economic logic with customary values. Indigenous communities play roles as owners, producers, and decision-makers.  | Proposing a new model of Indigenous Social Entrepreneurship that places cultural values, spirituality, and customary legitimacy at the core of social entrepreneurship.   | Promote co-creation-based development policies, which position indigenous communities as equal partners in the formulation and implementation of social entrepreneurship programs.  |

#### 4.6. Revisiting Empowerment Theory in Indigenous Contexts

In this context, Empowerment Theory has taken on a broader meaning. Wallace [6] emphasised empowerment as a multidimensional process involving individual and collective control over resources and decisions that affect their lives. However, findings in Merauke indicate that empowerment is rooted not only in control of economic resources but also in cultural legitimacy and customary agreements that govern social dynamics within the community. This dimension extends the conventional empowerment model into a more holistic framework, integrating customary values, spirituality, and local knowledge systems into the process of social transformation. The empowerment pattern in Merauke also demonstrates a shift from empowerment as an outcome to empowerment as a process. This process is evident through the emergence of critical awareness among indigenous farmers regarding structural inequalities, which then translates into collective action and the strengthening of social institutions such as indigenous cooperatives. This explains that empowerment is not merely the result of social entrepreneurship interventions, but also a sustainable, dialogical social practice embedded in community relations.

#### 4.7. Reconceptualising Social Capital for Indigenous Social Enterprises

These findings also extend the concept of Social Capital Theory in the context of indigenous communities. Social capital is typically understood in two main forms: bonding (internal ties that strengthen solidarity) and bridging (external networks that open access to new resources). In the case of Merauke, social entrepreneurship serves as a bridge connecting the two. Internal social ties are strengthened through cooperation, customary deliberation, and rotational leadership, ensuring equitable participation. Meanwhile, external relationships are developed through collaboration with supporting institutions such as the Papua Innovation Foundation, churches, and local market organisations. This pattern demonstrates that the success of social entrepreneurship in indigenous communities is determined not only by economic capacity but also by the ability to maintain a balance between internal solidarity and external connectivity, a form of embedded social entrepreneurship inherent in traditional social networks. Furthermore, the dynamics of social capital in Merauke demonstrate that trust and reciprocity are not merely economic functions but are also rooted in communal spiritual and ethical values. This explains why the social agri-industrial model can survive without external assistance: its foundation is built on mutual trust and moral obligations, governed by customary norms. Thus, this study extends Social Capital Theory by adding cultural and spiritual dimensions to the analysis of social entrepreneurship in indigenous communities.

#### **4.8. Integrating Sustainable Livelihoods and Cultural Sustainability**

Through the lens of the Sustainable Livelihood Framework, social entrepreneurship practices in Merauke demonstrate a unique form of livelihood diversification combining economic innovation with cultural and ecological preservation. Strategies such as product diversification (processing byproducts into crafts), the use of environmentally friendly local materials, and the development of eco-cultural branding demonstrate that economic sustainability can be achieved without sacrificing cultural values. In this context, the concept of sustainability is not merely ecological efficiency or financial stability, but an effort to maintain the continuity of cultural identity. Indigenous farmers are not only economic actors but also guardians of traditional values and knowledge that underpin their ethical production. This model expands the Sustainable Livelihood Framework by adding symbolic dimensions and cultural identity as resources to be nurtured rather than exploited. These findings also emphasise the importance of adaptive capacity, the ability of communities to adapt to climate change and market dynamics through collective risk-sharing mechanisms. The social and economic resilience of indigenous communities has been shown to depend on their ability to manage change without losing their identity. Thus, social entrepreneurship in Merauke serves as an adaptive mechanism that bridges modernity and tradition, innovation and conservation.

#### **4.9. Theoretical and Practical Implications**

Theoretically, this research offers three main contributions. First, it proposes a model of Indigenous Social Entrepreneurship that places cultural values and customary legitimacy at the core of social entrepreneurship practices. This model enriches social entrepreneurship theory, which has previously focused too much on economic efficiency and managerial innovation. Second, this study expands the frameworks of Empowerment Theory and Social Capital Theory by including the dimensions of collectivity, spirituality, and customary legitimacy as important determinants of empowerment and social capital formation. Third, from the perspective of the Sustainable Livelihood Framework, these results demonstrate that sustainability cannot be separated from cultural identity and local value systems. This challenges the development paradigm that places economic efficiency as the primary indicator of sustainability. In practice, these findings provide a basis for formulating more participatory, context-specific policies to empower indigenous communities. Local governments and development agencies can adopt a co-creation approach with indigenous communities, recognise local wisdom as a source of innovation, and integrate social entrepreneurship principles into rural development strategies. Overall, this research demonstrates that social entrepreneurship in Merauke not only generates economic growth but also drives profound social and cultural transformation. By integrating economic logic and social mission, indigenous communities have successfully developed an agri-industrial model that is not only financially sustainable but also aligned with cultural values and social solidarity. The Merauke context demonstrates that true empowerment emerges when social entrepreneurship is implemented as a social practice that values local identity, strengthens social networks, and creates space for the political agency of indigenous communities. Thus, this study emphasises that the future of social entrepreneurship must be rooted in principles of sustainability abilities that are not only ecological and economic, but also cultural and spiritual.

#### **5. Conclusion**

This study shows that social entrepreneurship is a key driver of change in the agro-industrial sector in Merauke, Eastern Indonesia. Social entrepreneurship helps indigenous farmers shift from subsistence-oriented farming techniques to more inclusive, resilient, and value-added agro-industrial systems by combining social mission, innovation, and sustainability. These projects don't just depend on external market forces; they also draw on local knowledge, cultural resources, and collective action to boost rural economic growth. The results show that community-based agribusinesses, eco-cultural branding techniques, and integrated cooperative models are all important for enabling farmers to gain greater economic freedom, social involvement, and institutional capacity. These methods make it easier for people to reach marketplaces, give them greater influence in negotiations, and encourage fair sharing of benefits among community members. Furthermore, implementing ecologically sustainable production techniques fosters long-term resource management, ensuring that agro-industrial expansion does not disrupt the natural equilibrium.

A significant contribution of this study is its emphasis on the need to incorporate indigenous cultural values and communal governance frameworks into agro-industrial enterprises. Combining traditional traditions, shared ownership structures, and decision-making processes that involve everyone makes communities stronger, more trusting, and more likely to persist over time. Governance approaches grounded in culture promote social cohesion and strengthen indigenous institutions. This allows communities to adapt to economic changes while preserving their identity and customs. From a theoretical standpoint, this research advances the social entrepreneurship literature by clearly linking shared value creation to empowerment processes within an indigenous context. This aspect has yet to be thoroughly examined in current studies. The study offers unique, context-specific empirical evidence from Eastern Indonesia, illustrating how agro-industrial innovation can develop organically from local social structures rather than be externally imposed. In general, the results show that agro-industrial development driven

by social factors can create economic value, strengthen local institutions, and promote sustainable rural change when closely linked to the area's culture and social structures.

### 5.1. Policy and Practical Recommendations

First, local governments should strengthen policy support for indigenous-based social enterprises by facilitating access to microfinance, technical assistance, and inclusive market channels tailored to community agro-industrial initiatives. Regulatory frameworks should recognise indigenous cooperatives as key actors in regional agri-industry development. Second, development agencies and non-governmental organisations are encouraged to prioritise capacity-building programs that integrate entrepreneurial skills, digital marketing, and financial literacy with indigenous values and collective decision-making practices. Third, higher education institutions and research centres should play a more active role in co-developing context-sensitive agro-industrial innovations through participatory research and community-based training. Finally, future research should adopt comparative and longitudinal designs to examine the scalability and long-term impacts of social entrepreneurship-driven agro-industrial models across diverse indigenous regions, thereby strengthening evidence for inclusive and sustainable rural development policies.

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