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Research Paper

Enhancing rural wellbeing: unravelling the impact of economic diversification in Sarawak

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ABSTRACT

This study delves into the multifaceted dynamics of economic diversification in the state of Sarawak, Malaysia, as well as the deep implications for rural wellbeing. Specifically, the aim of the study is to look into various economic diversification measures and their impact on the Iban rural community in Sri Aman, Sarawak. Sarawak, endowed with abundant natural resources and a diverse cultural legacy, has embarked on a transformative journey towards economic diversification in order to support sustainable development and enhance rural populations' livelihoods. This study used a mixed-methods approach, including surveys and in-depth interviews. It was found that the majority of households have increased their income by diversifying their sources of income by engaging in both farm and non-farm activities, such as formal and informal trading, wage labour, and remittances. The benefits of livelihood diversification can be seen in the community's decreased reliance on a single activity, the development of infrastructure, the survival of the Iban culture, and the resilience of the community.

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1. INTRODUCTION

Sarawak is Malaysia's largest state and is renowned as the Land of Hornbills. Sarawak has a diversified indigenous population and distant rural areas, making it a unique setting for investigating the impact of economic diversification [1], [2]. Sarawak's largest ethnic group, accounting for 30.3% of the population (DOSM, 2019), is the Iban. Rural poverty persists in Sarawak, however, due to low productivity,

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a shortage of non-agriculture jobs, and a rise in rural-urban migration [3], [4], [5], [6]. This study is distinct in that it focuses on a localised situation. This research also includes socioeconomic inclusion and the application of structural change development theory in tandem with the Iban decision-making framework. The purpose of this research is to look into various economic diversification measures and their impacts on the Iban rural community in Sri Aman, Sarawak, with a particular focus on the Pantu Sub-District.

Sarawak has embarked on a road of economic diversification, recognising the need for a more sustainable and equitable approach to growth. Economic diversification has emerged as a feasible technique for reducing poverty and improving rural communities' overall well-being. Indigenous peoples live in a distinct way. Economic diversification is the purposeful strategy of broadening the economic base through investment in new industries and sectors, minimising reliance on a single industry or product. In Sarawak's case, diversification includes a wide range of efforts aimed at promoting a more balanced and resilient economy. This transformative path towards economic diversification has far-reaching repercussions for Sarawak's rural communities, which serve as the backbone of the state's society. Rural communities, where traditional ways of life and cultural heritage are deeply embedded, are both beneficiaries and agents of change [3], [4], [7], [8], [9]. Their well-being is intrinsically related to the success of these diversification efforts, which include livelihood assets and cultural preservation [10], [11]. As a result, this study acknowledges that diversification is an important means of adapting to change, and the concept of diversification used in this study is based on the idea that rural communities engage in a variety of agricultural (farming) and non-agricultural (non-farming) activities to both make a living and earn money. Furthermore, agricultural diversification refers to farm operations such as growing diverse crops or rearing animals [12]. Furthermore, rural livelihood is not restricted to revenue produced simply from agriculture but can also be derived from a variety of non-farm sources. As a result, the rural non-farm economy includes a wide range of activities that vary by location [13], [14], [15]. The rural non-farm economy is defined in this study as non-farm livelihood activities. In this study, the rural non-farm economy is defined as livelihood activities that are not solely reliant on agriculture, wage labour, or self-employment, as well as unearned income such as remittances and other traditional activities related to natural resource utilisation and fishing.

This study aims to clarify the complex interactions between economic diversification and rural wellbeing in Sarawak. A mixed-methods approach was used to thoroughly comprehend the many ramifications of economic diversification by combining in-depth interviews with key stakeholders and survey questions answered by a sample of rural dwellers. We want to give policymakers and practitioners practical insights by shedding light on the issues and chances as well as the viewpoints of neighbourhood communities.

2. METHODOLOGY

A mixed-methods research approach, which combines qualitative and quantitative research methods, was used in the study. With this method, the research questions can be thoroughly and fairly explored, leading to a deeper comprehension of the topic being studied. By combining in-depth interviews with important respondents and survey questions given to 220 respondents, this study uses a mixed-methods technique to examine the effects of livelihood diversification on Iban well-being. A significant portion of the communities dwelling in Pantu Sub-District, Sri Aman Sarawak, are Iban, which is why it was chosen as the research location. Key respondents were interviewed in depth to get qualitative data. In-depth interviews were conducted with key informants who had knowledge of and insight into rural need for economic diversification. Twelve longhouse heads and the two chief communities have been selected as key informants for this undertaking.

Survey questions were used to gather quantitative data from a sample of 220 respondents. Their opinions were crucial for assessing and generalising trends and patterns connected to rural wellbeing in the context of economic diversification because they may represent a cross-section of the rural population in Sarawak. Key respondents were subjected to in-depth face-to-face interviews. The researchers used these interviews to collect extensive qualitative data so they could examine the complexities, perceptions,

and experiences around economic diversification. The chosen respondents received survey questions, and data was gathered using structured questionnaires created to capture quantitative data on variables of interest. Thematic analysis was done on the qualitative information from the in-depth interviews. To offer qualitative insights, common themes and patterns that emerged from the interviews were noted, classified, and examined. Statistics were applied to the quantitative data from the survey questionnaires to look for patterns, correlations, and linkages. The researchers combined their findings after studying both qualitative and quantitative data to create a thorough picture of how economic diversification has affected rural wellbeing in Sarawak.

3. RESULTS AND DISCUSSION

Decisions for rural well-being are not limited to the household, but rather entail a complex network of social interactions. Community chiefs, longhouse heads, and household heads play critical roles in determining livelihood diversification possibilities and increasing the well-being of the Iban community.

3.1 The Decision-Making Framework

Traditional practices and contemporary economic opportunities frequently need to be carefully considered and negotiated. Ibans typically reside in longhouses, which are huge multi-family communal structures. The Iban are heavily influenced by economic factors when making decisions. Agriculture, hunting, and fishing are still essential components of their subsistence lifestyles. However, measures for economic diversification, like involvement in cash crop farming and engaging in formal or informal businesses, have added new complications to their decision-making processes. They frequently base their social structure and decision-making on these longhouses. The community chiefs, heads of longhouses, and heads of families play important roles in the Iban community, where they have influence on household decision-making as they gain knowledge and experience to bring about beneficial changes in the community lifestyle in response to the present development. It was found that they attended various activities, briefings, and training organised by the district office and other government agencies, such as the briefings on Adat Iban (1993), the Wildlife Protection Ordinance (1998), and crime prevention, to carry out their roles more effectively.

The local community and the government or any other external institutions are connected by the community chiefs as well. Their duties and responsibilities include presiding over any native court, representing their community at official events, helping the government care for their community's welfare, and generally supporting all government officers in fulfilling their public responsibilities. The head of longhouses is in charge of supporting the community chief in a variety of administrative tasks, including resolving religious, cultural, and infrastructure-related issues. The headman is tasked with leading the community's members in decision-making based on the group's best interests and with input from its members. The Village Development and Security Committee (JKKK) is typically consulted before the head of the longhouse makes any decisions that affect his community. In addition to having problem-solving abilities, the leader of the longhouse should uphold Iban society's traditions and culture. The longhouse leader engages in close discussion with the longhouse community. In the discussion, recommendations for government-sponsored community development initiatives, such as farming plans for the cultivation of cash crops, are discussed. The JKKK is also responsible for carrying out extensive human capital transformation in order to foster a progressive and cohesive community and to support governmental initiatives. In Pantu Sub-District, a highly hierarchical system with the head of the longhouse as a central figure in decision-making was observed with regard to this socio-cultural structure of the Iban. This is because the head of longhouse is the only one who is able to apply for any infrastructure-related subsidies and projects concerning electricity, water, and road access. According to the findings, the Iban family is an important unit in the longhouse community. The head of the household is responsible for leading their family members and bringing them to an agreement. In this context, consensus refers to a situation in which all household members mutually agree to a choice made by the leader of the family after listening to his thoughts and concerns. According to the findings, while certain outcomes may not be to everyone's liking,

they regarded it as the best decision for the home. Typically, the oldest member of the family would assume the role of household head; nevertheless, the findings revealed a substantial link between headship and the family's highest income earner. The division of family labour is based on an individual's gender, age, and physical capacity, and this is a recognised practice among the Iban people in Pantu. According to these findings, the social structure of the Iban community influences decision-making, which in turn influences how households pick their livelihood diversification options.

3.2 Rural Economies and Diversification

The Iban community in Pantu Sub-District has greater opportunity to diversify their sources of income due to structural changes in livelihood strategies. According to the findings, subsistence farming is associated with traditional agriculture in Pantu Sub-District, whereas commercial agriculture and non-farm labour are more representative of today's society and have helped Ibans diversify their sources of income. It was found that 70% of the households involve themselves in agricultural activities as their main occupation, even though they still diversify their secondary income by engaging in non-farm jobs. The varied combinations of cash crops and food crops clearly describe the household livelihood plans in Pantu. Averaging three distinct types of crops per family household, nearly every household in Pantu produces a variety of crops. The engagement of households was highest in the cultivation of rice (26.12%), followed by fruits (18.84%) and other crops (17.54%). The villagers in Pantu Sub-District depend on these three categories of crops for both income and self-sufficiency. These households gain cash through the sale of their extra farm output, increasing their access to a wider variety of foods. In addition, the region cultivates three main cash crops, with oil palm accounting for the biggest percentage (14.18%), followed by rubber (11.75%), and pepper (11.57%). Income from households is directly derived from cash crops. In order to increase food security, it was discovered that farm livelihood techniques are an essential component of rural livelihoods in Pantu Sub-District. There was a diversification of livelihoods and non-agricultural activities in Pantu Sub-District, including wage work, formal and informal trading, and reliance on remittances. The non-farm sector is significant because it offers the rural residents of Pantu Sub-District a variety of work alternatives. It was discovered through this survey that the rural populations in Pantu Sub-District do not rely solely on agriculture for their means of subsistence because 30% of the respondents reported receiving money from wages, self-employment, and unearned income. About 12.7% of the respondents work for pay in private businesses, including oil palm companies, on a contract basis in Pan Borneo projects, and a handful work as unskilled labourers in nearby coffee and grocery stores. In contrast, 6.4% of respondents who reported having a paid job work for the government as teachers, nurses, police officers, or military personnel. This segment obtained greater education to work in government fields and support themselves. The majority of the 5% of household heads who depended on pensions, government social assistance, and remittances were older people. Fishermen and collectors of forest goods make up 3.2% of the workforce in the category of other occupations. Additionally, 1.8% of people work for themselves and own both legal and informal businesses, including grocery stores, shops that offer handicrafts and forest products, and van rental companies. Homemakers, who mostly rely on unearned income, such as remittances from their spouse or family members, make up the remaining 1.4% of the workforce.

Natural resources, such as forest gathering and land, are important to Iban lifestyles since people have historically relied on these resources for sustenance, economic activity, and cultural practices. The study discovered that forest collecting ($p = 0.016$) has a substantial impact on the monthly income of households as more inhabitants sell vegetables in local markets in Pantu and Lachau towns. Forests also supply a variety of resources essential to the Iban way of life, including timber, rattan, bamboo, and different non-timber forest products such as edible plants, herbs, and indigenous medicines. These forest materials are collected and sold to supplement their income. Then, the size of the land has a substantial ($p = 0.02$)) impact on the monthly revenue. Then, the size of the land has a substantial ($p = 0.02$)) impact on the monthly revenue. Ibans grow income crops such as rubber, palm oil, and pepper in addition to subsistence crops. These cash crops are frequently sold in local marketplaces, providing an economic source for Iban families. Access to large and adequate land is required for the growth of these crops. The

move from agriculture to nonfarm income means that an increasing number of farmers have enough income to cover their daily needs. Furthermore, remittances increased the income of rural families in Pantu Sub-District, particularly low-income families whose members frequently migrated in order to improve their livelihood and support their families. They picked diversification activities because they considered that diversified livelihood strategies in Pantu Sub-District were more sustainable and less subject to environmental hazards and seasonality than non-diversified ones. With shifting economic conditions and environmental concerns, the Iban people have changed their livelihoods through wage labour, handicrafts, and small-scale businesses. Their ability to diversify their income sources is influenced by their access to land and natural resources.

3.3 The Impact of Rural Economies Diversification

The Iban community in Sarawak, Malaysia, has demonstrated the transformative impact of diversification by reducing reliance on a single activity and striving for greater economic and cultural sustainability. It was found that human capital in Pantu is changing as a result of the labour force decline, resulting in a significant reliance on external labour. This is because several household members, particularly young individuals, shifted to urban areas. To address the family's labour needs, the Iban employ wage labourers, both local and international, to work on their oil palm plantations. In addition, to combat labour shortages, the Iban cultivate a cooperative culture in rice growing. The study's findings also demonstrate that the financial assets of rural Pantu are changing as their household income comes from diverse agricultural and non-agricultural occupations that enhance their lives. Diversification entails formal and informal enterprise, infrastructural improvement, cultural identity preservation, and general resilience. The promotion of formal and informal entrepreneurship in rural areas is an important part of livelihood diversification. Local entrepreneurs in Pantu Sub-District have delved into diverse economic sectors such as agribusiness, handicraft manufacture, and eco-tourism as alternatives to conventional livelihoods such as agriculture and timber. These business endeavours generate additional income, increase financial stability, and open the way to economic self-sufficiency. Infrastructure development is a crucial driver of rural livelihood diversification. Improved transportation, market access, and communication networks have increased economic options for the Pantu Iban population. This advancement not only improves the flow of products and services, but it also improves the general quality of life by offering access to education, healthcare, and social services. Physical assets in Pantu Sub-District have changed, as can be seen in schools, the Pantu health facility, water supply, electricity supply, and road accessibility. This has an impact on the accessibility and choice of livelihood strategies among the local Iban in Pantu Sub-District. Farmers in Pantu Sub-District can also collaborate and innovate with various agencies, such as the Farmers Association, the Department of Agriculture (DOA), and the Pantu Sub-District Office.

Maintaining cultural identity is critical when communities diversify their livelihoods. The Iban people have taken active steps to ensure the survival of their customs, rituals, and traditional knowledge, owing to their rich cultural legacy. Even in the face of increasing industrialization, cultural preservation measures such as the resuscitation of traditional crafts and the transmission of oral histories contribute to community solidarity and pride. Resilience is an important result of livelihood diversification. Rural communities like Pantu become less vulnerable to economic shocks, environmental calamities, and market changes when they reduce their reliance on a single activity. The ability to adapt and innovate in the face of adversity is a hallmark of resilient communities, and diversification acts as a buffer against adversity. The impact of rural livelihood diversification, as demonstrated by the activities in Pantu Sub-District, goes beyond economic considerations. It includes official and informal enterprise, infrastructure development, cultural preservation, and resilience cultivation. Rural communities that lessen their reliance on a particular activity improve their ability to flourish in a changing world while preserving their distinct cultural identities. Overall, the structural change development demonstrates how the transformation of livelihood strategy affects the Iban community in Pantu Sub-District's livelihood. They are reliant on the opportunities provided in rural areas. Because agriculture is not the main source of income in rural Pantu,

these options are tied to livelihood diversification. This means they can earn revenue and obtain employment by engaging in farm and non-farm activities.

4. CONCLUSION

The Pantu Sub-District in Sarawak, Malaysia, study on livelihood diversification has provided useful insights into the complex consequences of reducing reliance on a single economic sector. Rural communities can accomplish sustainable growth while retaining their distinct identities by delving into several aspects of diversification that also impact infrastructure development, cultural survival, and resilience. Several socioeconomic strategies, such as investments in farmland infrastructure, fisheries training, and money to develop commercial farming, could be implemented to develop these areas. Non-agricultural industries, such as rural tourism and small and medium-sized enterprises, also have significant development potential. Microfinance programmes and grants can help people and organisations gain access to financial resources for prospective entrepreneurs in the community. Access to financial resources for budding entrepreneurs in the community, such as microfinance programmes and grants, can help individuals and organisations establish and grow their businesses. Furthermore, the Sarawak government should continue to invest in infrastructure development, especially in transportation, communication, and healthcare services. Improved infrastructure will improve not only economic prospects but also citizens' general quality of life. Future academics should undertake additional research on livelihood diversification and natural resource management for other ethnic groups living in Sarawak's interior, such as the Kedayan, Murut, Bisaya, and Berawan. Finally, the Pantu Sub-District's successful experience serves as a model for rural development programmes attempting to lessen reliance on a particular economic activity. Rural communities may pave the way for sustainable and equitable development by supporting economic diversification while protecting cultural identity and strengthening resilience. The ideas give a road map for policymakers, local governments, and development organisations to support and duplicate similar activities in other rural areas of Sarawak.

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Author Contributions Statement

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Leha Saliman	✓	✓	✓	✓		✓		✓	✓	✓	✓			
Wong Swee-Kiong		✓	✓	✓			✓	✓	✓		✓	✓		✓

C : **C**onceptualization
M : **M**ethodology
So : **So**ftware
Va : **Va**lidation
Fo : **Fo**rmal analysis
I : **I**nvestigation
R : **R**esources
D : **D**ata Curation
O : Writing - **O**riginal Draft
E : Writing - Review & **E**diting
Vi : **Vi**sualization
Su : **Su**pervision
P : **P**roject administration
Fu : **Fu**nding acquisition

Conflict of Interest Statement

The authors declare that there are no conflicts of interest regarding the publication of this paper.

Informed Consent

All participants were informed about the purpose of the study, and their voluntary consent was obtained prior to data collection.

Ethical Approval

Not Applicable.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

REFERENCES

[1] Alamgir, M., Campbell, M. J., Sloan, S., Engert, J., Word, J., & Laurance, W. F. (2020). Emerging challenges for sustainable development and forest conservation in Sarawak, Borneo. PloS one, 15(3), e0229614. doi.org/10.1371/journal.pone.0229614

[2] D. Freeman, The Iban of Borneo. Kuala Lumpur: S Abdul Majeed & Co. Sdn. Bhd, 1992.

[3] Y. Kato and R. Soda, The Impact of RSPO Certification on Oil Palm Smallholdings in Sarawak. Singapore: Springer, 2020. doi.org/10.1007/978-981-13-7513-2_16

[4] Y. Kato et al., 'Multi-ethnic Society of Central Sarawak: An Ethnographic Analysis', in Anthropogenic Tropical Forests, 2020, pp. 85-109. doi.org/10.1007/978-981-13-7513-2_5

[5] P. A. Tedong, Z. A. S. Zyed, R. Jani, and F. A. Fazlie, 'Rural Residents' Perceptions on the Poverty Alleviation and Governance in Sarawak, Malaysia', Malaysia. International Journal of Business and Society, vol. 23, no. 2, pp. 649-664, 2022. doi.org/10.33736/ijbs.4831.2022

[6] A. Tilai, R. K. Brahmana, and C. H. Puah, 'Does Financial Planning Moderate the Relationship between Productivity and Wellbeing of Sarawak Paddy Rice Farmer?', Malaysian Journal of Consumer and Family Economics, vol. 29, pp. 74-107, 2022.

[7] H. Munan, Sarawak: Historical Landmarks. Kuching: Bahagia Press Sdn. Bhd, 2015.

[8] N. A. Latip, S. M. Rasoolimanesh, M. Jaafar, A. Marzuki, and M. U. Umar, 'Indigenous Participation in Conservation and Tourism Development: A Case of Native People of Sabah', Malaysia. International Journal of Tourism Research, vol. 20, no. 3, pp. 400-409, 2018. doi.org/10.1002/jtr.2191

[9] N. Tugang and G. Kiyai, 'The Adaptation of Nature in Iban Cultural Artefact', Jurnal Borneo Arkhailogia (Heritage, Archaeology and History), vol. 7, no. 1, pp. 86-101, 2022. doi.org/10.51200/jba.v7i1.4133

[10] A. H. Adlina, A. J. Jayum, R. I. Sri, O. Normala, and H. M. Mohd, 'Traditional Knowledge and Environmental Conservation among Indigenous People in Ranau, Sabah', Sabah. Global Journal of Human Social Science, vol. 13, no. 3, pp. 37-53, 2013.

[11] K. H. D. Tang, 'Anticipations for and Perceived Barriers of Development among the Sarawak's Highlanders', Pertanika Journal of Social Sciences and Humanities, vol. 28, no. 2, 2020.

[12] K. Waha et al., 'Agricultural Diversification as an Important Strategy for Achieving Food Security in Africa', Global Change Biology, vol. 24, no. 8, pp. 3390-3400, 2018. doi.org/10.1111/gcb.14158

[13] F. J. Adam, 'Native Customary Rights Over Land in Sarawak', Journal of Malaysian and Comparative Law, vol. 25, pp. 217-232, 2019.

[14] R. Wadley, 'Slashed and Burned: War, Environment, and Resource Insecurity in West Borneo during the Late Nineteenth and Early Twentieth Centuries', The Journal of the Royal Anthropological Institute, vol. 13, no. 1, pp. 109-128, 2007. doi.org/10.1111/j.1467-9655.2007.00416.x

[15] J. Yan, H. Li, X. Hua, K. Peng, and Y. Zhang, 'Determinants of Engagement in Off-Farm Employment in the Sanjiangyuan Region of the Tibetan Plateau', Mountain Research and Development, vol. 37, no. 4, pp. 464-473, 2017. doi.org/10.1659/MRD-JOURNAL-D-17-00023.1

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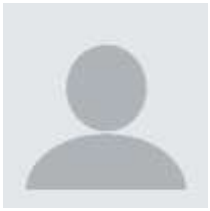
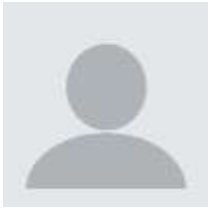
	**Leha Saliman**, is a lecturer and researcher at the Faculty of Social Sciences and Humanities, University Malaysia Sarawak (UNIMAS), Malaysia. Her academic interests include social sciences, community development, education, and interdisciplinary research. She actively contributes to research and scholarly publications in her areas of expertise. Through teaching, research, and community engagement, she is committed to advancing knowledge, fostering critical thinking, and supporting sustainable social development through evidence-based academic practices. Email: sleha@unimas.my
	**Wong Swee-Kiong**, is a lecturer and researcher at the Faculty of Social Sciences and Humanities, University Malaysia Sarawak (UNIMAS), Malaysia. His research interests include social sciences, human development, education, and interdisciplinary studies. He has participated in academic research and published in scholarly journals, contributing to knowledge in his field. His work emphasizes innovative research, quality education, and community engagement while promoting collaboration between academia, industry, and society.