

## AN INTEGRATED APPROACH TO FACILITATE SUSTAINABLE LIVELIHOODS

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### ABSTRACT

In order to promote resilient livelihoods in rural areas, an integrated approach to sustainable livelihoods is required. Through an exhaustive review of scholarly literature and publications, this paper presents a comprehensive analysis of the concept of an integrated approach to sustainable rural livelihood, while emphasising the key factors that determine its effectiveness. The effectiveness of rural development initiatives that promote inclusivity has been found to be contingent on numerous factors, as per prior research findings. These factors include community engagement, local and indigenous knowledge consideration, gender inclusivity, environmental sustainability, and strategic rural partnership. This paper can significantly contribute to the academic comprehension of rural livelihoods, resilience, and inclusive development practises, thereby paving the way for future research and academic advancement. *Keywords: Integrated, Rural, Livelihood, Sustainable, Development and Resilience*

### INTRODUCTION

The concept of integrated livelihood encompasses a comprehensive approach aimed at fostering equitable progress and improving the well-being of rural communities across the entire country, with the ultimate goal of fostering sustainable development (Bruno, Fernandez & Balgopal, 2021; Syafar & Ulumi, 2021). The primary responsibility of the Ministry of Rural and Regional Development is to design policies and programmes that aim to foster inclusive rural development, alleviate poverty, and improve the overall well-being of individuals residing in rural regions (Noor & Ramin, 2012). The ministry engages in partnerships with various governmental entities, non-governmental organisations (NGOs), and community-based organisations to execute initiatives targeting the unique requirements and obstacles encountered by rural communities. These initiatives encompass community-based development projects, poverty alleviation programmes, sustainable agriculture endeavours, and rural transformation centres (Kunjuraman & Hussin, 2017; Ngah, Abdul Kadir, & Mohd Lajin, 2022). The Malaysian government is prioritising a holistic strategy to enhance rural livelihood and development, encompassing enhancements in road accessibility, digital infrastructure, energy provision, and water supply (Man & Manaf, 2022). Despite having made advancements, Malaysia continues to face the issue of fostering integrated livelihoods, particularly in rural regions where a substantial number of the population is involved in low-wage occupations within the agricultural sector and informal economy. Moreover, the persistent challenges of socioeconomic hardships, health issues, and inadequate access to food continue to afflict the low-income demographic, commonly referred to as the B40 group (Shahar et al., 2019). The efficacy of Malaysia's initiatives aimed at mitigating rural poverty remains uncertain, as poverty continues to persist as a longstanding concern that has the

potential to engender financial instability within the lower-income demographic, specifically among the rural impoverished (Dawood, Ghazali, & Samat, 2019; Sharizan, Redzuan & Rosman, 2021). Furthermore, there is a scarcity of research that thoroughly examines the aspects that enable a cohesive livelihood. Recent studies have been conducted by scholars who are investigating the relationship between rural development and transformation in the context of the sustainable development aim. For instance, Chan (2023) explores the concept of sustainable rural tourism, while another study focuses on revitalising the Malaysian Rural Community Centres. Based on a comprehensive assessment of existing literature, the present study aims to examine the ideas of integrated rural livelihood and analyse the key determinants that influence the efficacy of promoting integrated rural livelihood for the purpose of achieving sustainable development. The concept of an integrated rural livelihood underscores the significance of including and empowering all individuals within the rural community, particularly those who face marginalisation, including women, youth, and indigenous populations (Muhtar et al., 2023; Panakaje et al., 2023). The objective is to ensure equitable access to resources, opportunities, and decision-making mechanisms, while also supporting extremely disadvantaged households in their transition towards sustainable livelihoods and economic stability. In addition, it has been argued that the efficacy and sustainability of integrated rural development programmes can be enhanced by customising them to align with the distinct requirements and ambitions of indigenous communities (Achmad et al., 2023; Mamokhere & Meyer, 2023).

Rural communities are categorised according to their economic activity and geographical positioning, encompassing those situated in river valleys, high mountains, as well as agricultural and non-farming households (Dorward et al., 2007; Singha, 2013). According to Dijkstra and Poelman (2014) and Errico (2017), a region is classified as rural when it exhibits a population density below 150 individuals per square kilometre, and its residents predominantly consist of indigenous populations who actively preserve their unique cultural practises and customs. Rural lifestyles are intricately interconnected with agriculture, local economies, and the natural environment. Moreover, in contrast to urban populations, rural communities encounter greater challenges in attaining sustainable livelihoods as a result of their characteristic living conditions and disadvantaged socioeconomic status (Chen et al., 2020; Rashid et al., 2019). The authors Andress and Fitch (2016) have emphasised the enduring nature of economic inequality between urban and rural regions.

Rural livelihoods are persistently impacted by a range of issues, including inadequate infrastructure, limited access to finance services, restricted market access, and social disparities. The establishment of integrated livelihoods within rural regions is a crucial factor in bolstering the resilience of communities, enabling them to endure and recuperate from various adversities and pressures, all while preserving their ability to adjust and flourish amidst dynamic circumstances (Sapura et al., 2023). Furthermore, the implementation of integrated livelihood strategies in rural regions serves to enhance the capacity of individuals and communities to broaden their sources of income, foster the adoption of sustainable farming methods, enhance opportunities for education and skills development, and facilitate their involvement in decision-making procedures (Shahbaz et al., 2022; Yadaz et al., 2022). The implementation of sustainable rural development strategies that prioritise the promotion of integrated livelihoods has the potential to effectively address the poverty cycle, reduce

vulnerability, and establish viable routes for rural communities. Tran et al. (2021) argue that the achievement of sustainable livelihoods is a complex endeavour, as it is influenced by various elements that affect the effective generation of employment opportunities, growth in income, mitigation of risks, enhancement of food security, and utilisation of resources. Full community engagement and environmental sustainability are identified as crucial elements that contribute to sustainable development and the integrated livelihood of rural communities (Choi & Murray, 2010; Iqbal et al., 2022). This study does a comprehensive literature analysis to augment comprehension of the pivotal role that integrated rural livelihoods play in fostering sustainable development in rural regions. The primary objective of this study is to provide a comprehensive analysis of the potential strategies that can contribute to a fair and resilient future for individuals residing in rural regions. The study seeks to explore opportunities for equitable growth and achievement, ensuring that all individuals in these places have equal prospects for personal development and success.

Numerous scholars have conducted studies on rural livelihoods and its correlation with sustainable development. For instance, Kamrudin et al. (2020) conducted an investigation on the sustenance of rural livelihoods by means of entrepreneurship and the advancement of creative villages. In their study, Hassan et al. (2021) investigate the implications of movement control orders on rural livelihoods in Malaysia. Similarly, Rashid et al. (2021) explore the establishment of a modern rural development framework for Malaysia. In a recent study, Rahman (2021) examines the notion of environmental citizenship as a means to promote comprehensive and sustainable development. Hence, the objective of this research is to examine the concept of integrated rural livelihoods as a strategy for promoting sustainable development.

## **RESEARCH OBJECTIVE**

This study was carried out with the objective of examining integrated Rural livelihoods to encourage Sustainable Development. To be specific, the objectives of this study can be specified in two folds as follows:

1. Identify the conceptual definition of integrated approaches to rural livelihood.
2. Analyse the key factors that influence the effectiveness of an integrated approach to facilitate sustainable livelihoods in rural areas.

## **RESEARCH METHOD**

In light of the objective of this paper, which is to examine the findings from previous research that focused on the integration of rural livelihoods as a means to foster sustainable development, a secondary data gathering method was utilised to perform a comprehensive literature analysis. A preliminary literature review is a qualitative synthesis that functions as the primary research approach for composing a concept paper. The process of collecting data encompasses two distinct ways, specifically primary and secondary data collection methods (HR & Aithal, 2022).

The utilisation of secondary data analysis enables researchers to investigate pre-existing data sets and publicly available sources. This methodology allows scholars to get valuable perspectives and articulate well-informed assertions regarding the study issue, without

necessitating the collection of original data (Khoa, Hung, & Hejsalem, 2023). This study utilises current literature to examine sustainable livelihood ideas and associated aspects in order to critically understand their role in fostering sustainable development. Secondary data is employed for this purpose. A full comprehension of the research subject matter is attained by employing secondary data within the framework of a systematic literature review. The usage of secondary data presents several advantages, including increased accessibility to pre-existing information, cost-effectiveness, extensive coverage, and access to historical data. In addition, it enables the presentation of a knowledgeable and comprehensive research concept (Ruggiano & Perry, 2019).

The primary means of accessing scholarly literature include electronic databases, doing backward and forward searches, as well as critically examining and summarising relevant academic papers, reports, books, and other published materials related to the research subject. The literature review is an essential component in situating the research within its broader context, identifying areas where information is lacking, and providing a foundation for the rationale behind the planned study. The categorization of literature reviews can be delineated into two distinct types: those that serve as a contextual foundation for empirical investigations, and those that exist independently as comprehensive works (Rother, 2007; Xiao & Watson, 2017). This study focuses on independent reviews that aim to comprehend the current literature by synthesising and interpreting past studies. According to Xiao and Watson (2019), the review process consists of three distinct stages: planning, conducting, and reporting. To initiate this study, the researchers are required to engage in the preliminary phase, which encompasses the identification of the necessity for a review, formulation of research inquiries, and establishment of a review structure. Furthermore, the researchers analyse and assess the core principles of integrated development and its connected elements, while integrating the relevant information. In this phase, the data is subjected to descriptive analysis, which is subsequently followed by a content analysis employing specific analytical categories. The data is carefully scrutinised in order to ascertain its alignment with the research question, aims, and its pertinence to the integrated livelihood topic being investigated. In conclusion, the researchers gather all relevant data and produce conclusions that are derived from the comprehensive analysis of the existing literature.

## **LITERATURE REVIEW**

The term "rural communities" refers to communities primarily engaged in agricultural activities and possessing a strong interdependence with natural resources, as noted by Martin et al. (2013). The concept of integrated livelihoods has garnered considerable attention and has been subject to extensive examination by numerous scholars hailing from diverse disciplinary backgrounds. These erudite individuals have approached the topic from a multitude of angles, thereby enriching understanding of this multifaceted phenomenon. The concept of livelihoods, as expounded upon by Chambers and Conway (1992), Ellis (1999), and Morse (2013), is characterised by its integration and sustainability. Livelihoods are deemed integrated and sustainable when they possess the capacity to adapt to and recuperate from various stresses and shocks, while simultaneously preserving their capabilities and resources. This notable definition underscores the importance of resilience and resourcefulness in the pursuit of sustainable livelihoods. In addition, the concept of integrated livelihood is rooted in the

principle that developmental endeavours ought to align with the objectives, extent, and preferences of the community (Kamaruddin & Shamsuddin, 2014). The concept of integrated livelihood holds particular significance within marginalised communities, wherein individuals rely on diverse activities to sustain their livelihoods, as opposed to traditional forms of employment (Gallaher et al., 2015; Pandey et al., 2017). In his seminal work, Scones (2015) posited that the notion of integrated livelihood in the context of sustainable development necessitates the presence of three key dimensions: social capability, monetary power, and environmental feasibility. By emphasising the importance of these aspects, Scones aligns with the broader scholarly discourse surrounding the concept of integrated livelihood and its role in fostering sustainable development. The concept of integrated livelihood has been extensively examined in various studies. However, it is worth noting that a universally accepted definition of integrated livelihood in the context of sustainable development in rural areas has yet to be established within the existing body of literature. The present study addresses a notable lacuna in the existing literature by providing a comprehensive conceptualization of integrated livelihood and elucidating the various factors that exert influence on its trajectory towards sustainable development. The integrated livelihood is a multifaceted construct that is influenced by various factors. One such factor is the access to assets, which has been identified as a crucial determinant of livelihood outcomes (Berhanu, Woldemikael & Beyene, 2022). Assets, in this context, refer to the resources and capabilities that individuals possess, such as land, livestock, and financial capital. The availability and control over these assets can significantly impact the ability of individuals to engage in income-generating activities and ultimately shape their livelihood trajectories. Income-generating activities, another key factor, play a pivotal role in determining the overall well-being and sustainability of integrated livelihoods. These activities encompass a wide range of economic endeavours, including agricultural production, small-scale businesses, and wage labour (Hendratmi et al., 2022). The diversity and profitability of income-generating activities are crucial in ensuring the resilience and adaptability of livelihood systems in the face of environmental change and risk. By diversifying their income sources, individuals can mitigate the potential negative impacts of environmental shocks and fluctuations, thereby enhancing their overall livelihood security. Empowerment, as a third factor, is a critical component in shaping integrated livelihoods. Empowerment refers to the process through which individuals and communities gain the knowledge, skills, and agency to actively participate in decision-making processes and exercise control over their own lives (Berhanu, Woldemikael & Beyene). The concept of integrating livelihoods within rural communities has garnered significant attention in recent scholarly discourse. Scholars such as Awazi, Quandt, and Kimengsi (2023) and Blackmore et al. (2023) have explored the intricate dynamics involved in this process. They argue that successful integration occurs when rural communities are equipped with the necessary skills to both conserve and harness their indigenous knowledge in novel and resource-preserving ways. This perspective highlights the importance of striking a delicate balance between innovation and sustainability within these communities.

The persistence of poverty in rural areas, despite the abundance of agricultural resources, has been a subject of concern and investigation among scholars. Numerous studies have sought to understand the underlying factors that contribute to this paradoxical phenomenon. This literature review aims to synthesise and analyse the existing body of

research in order to shed light on the complex relationship between agricultural resources and rural poverty. The agricultural sector in Malaysia exhibits a distinct duality, characterised by the coexistence of two prominent industries: the smallholder sector and the plantation-based sector. This duality has been a notable feature of the Malaysian agricultural landscape and has garnered significant attention from scholars and researchers alike. The agricultural industry concentrated significant economic resources on cash crops, such as oil palm, rubber, and cocoa, as well as food crops like rice, pepper, fruits, and vegetables (Rustiadi et al., 2023; Saliman & Swee-Kiong, 2023). The prevailing situation in Malaysia is characterised by a discernible inclination towards a progressively diminishing availability of agricultural labour, primarily attributable to the swift and substantial movement of individuals towards urban localities. The significance of agricultural development in rural Malaysia cannot be overstated, as it plays a pivotal role in the nation's economy. However, this progress is impeded by several significant challenges, namely agricultural sustainability, food security, and environmental health. These obstacles have been extensively discussed and analysed in recent scholarly works by Alam et al. (2023) and Azman et al. (2023). The prevailing consensus among scholars is that a significant proportion of individuals experiencing impoverished conditions are predominantly concentrated in rural locales, where their sustenance is intricately tied to agricultural pursuits. The interplay between integrated livelihood strategies and poverty is of paramount importance in the pursuit of sustainable poverty alleviation, as evidenced by the scholarly works of Liu et al. (2017) and Wang et al. (2020). These studies shed light on the intricate relationship between livelihood strategies and poverty, highlighting the significance of understanding and addressing this connection in order to achieve long-term poverty reduction. By examining the findings of these researchers, we can gain valuable insights into the complex dynamics at play and the potential pathways for effective poverty alleviation through integrated livelihood strategies.

Abdullahi (2019) conducted a study exploring the potential avenues for alleviating rural poverty. The findings of this research suggest that a shift in focus from solely emphasising agriculture to incorporating non-farm activities can be an effective strategy. By broadening the scope of economic opportunities available to rural communities, the potential for poverty reduction can be enhanced. This perspective challenges the conventional notion that agriculture alone is the primary driver of rural development and highlights the importance of diversifying income sources. Abdullahi's (2019) study contributes to the existing literature by shedding light on the potential benefits of non-farm activities in addressing rural poverty. In addition, esteemed scholars such as Seng (2015) and Sarou (2019) have put forth the notion that the amelioration of poverty can be effectively tackled through the transition from agricultural pursuits to non-farm endeavours within rural areas. In light of the aforementioned considerations, it is imperative to acknowledge that poverty alleviation endeavours ought to transcend the mere pursuit of general economic advancement. Instead, a more comprehensive approach is warranted, one that encompasses the provision of targeted financial opportunities to the marginalised segments of society, the development of physical infrastructure, and the empowerment of individuals to mitigate their vulnerability to a myriad of adversities and challenges (Guo & Liu, 2022; Odoh et al., 2019). The extant scholarly discourse posits that the forest, in its capacity as a natural resource, assumes a pivotal role in mitigating adversity and safeguarding individuals against the perils of famine and economic deprivation (Fahad et al.,

2022; Nguyen, Nguyen, & Grote, 2022). The provision of a consistent and nutritionally sufficient food supply is exemplified by the presence of wildlife and plants in various ecosystems. Furthermore, Newton et al. (2016) assert that the utilisation of wood-based products plays a crucial role in alleviating poverty among households, as it serves as a mechanism for building reserves, amassing collections, and accumulating resources. Notwithstanding the aforementioned, extensive investigations have elucidated that individuals of low socioeconomic status are confronted with a myriad of challenges that necessitate their surmounting, such as restricted availability of educational resources, pertinent proficiencies, financial means, and rights to land ownership, in order to avail themselves of the prospects presented within the rural non-farm economic framework (Drall & Mandal, 2021; Shi & Qamruzzaman, 2022). Hence, it is imperative to comprehensively comprehend the full scope of the amalgamated sustenance in rural locales and the factors that influence earnings with the aim of mitigating poverty.

## **RESULTS AND DISCUSSION**

### *The Concept of Integrated Approaches*

The present discourse aims to expound upon the concept of integrated approaches, which has garnered significant attention in various fields of study. Integrated approaches refer to the utilisation of multiple strategies or methodologies that are combined in a cohesive manner to address complex problems or challenges. The notion of integrated approaches encompasses a holistic examination of various dimensions of livelihoods, aiming to gain a comprehensive understanding of the circumstances faced by impoverished individuals and to devise initiatives that promote enduring sustainability of their livelihoods (Fahad et al., 2023). The concept of an integrated approach to livelihoods emphasises the importance of taking into account various dimensions of livelihoods when formulating strategies that are more resilient. By considering multiple aspects such as economic, social, and environmental factors, this approach aims to create a comprehensive framework that can better address the complexities and interdependencies inherent in livelihood systems. This holistic perspective acknowledges that livelihoods are not solely dependent on economic factors, but are also influenced by social and environmental dynamics. By adopting an integrated approach, policymakers and practitioners can develop strategies that are better equipped to withstand shocks and stresses, and promote sustainable and inclusive development. In accordance with the findings of Schnurr et al. (2023), it is evident that the pursuit of sustainable development necessitates careful consideration of various components. Specifically, economic, social, environmental, and cultural factors emerge as crucial elements that demand attention in order to foster sustainable development within communities. By acknowledging the significance of these multifaceted dimensions, stakeholders can effectively navigate the complexities inherent in the pursuit of sustainability. In his seminal work, Simpson (2009) expounds upon the concept of integrated livelihoods, elucidating their profound impact on the enhancement of livelihoods and the accrual of benefits for communities through the utilisation of local labour, goods, and services. The achievement of sustainable infrastructure, supportive policies, and environmental strategies is deemed feasible in attaining the desired outcome. In addition, the study conducted by Wang, Eisenack, and Tan (2019) establishes a connection between the aforementioned concept and the notion of rural revival. This phenomenon encompasses a series of activities aimed at reevaluating,

strengthening, and revitalising stagnant rural development. Examples of such endeavours include the establishment of novel rural settlements and the advancement of rural industries. In order to maximise the effectiveness of integrated livelihood interventions, it is imperative to implement them in an equitable manner, taking into consideration the social and cultural dynamics of the intervention area. This entails a comprehensive understanding of the local institutions, power structures, and ethnic group distinctions that shape the socio-economic landscape (Singh et al., 2022). By acknowledging and incorporating these contextual factors, interventions can be tailored to better align with the needs and aspirations of the target population, thereby enhancing their overall impact. In their seminal work, Ali and Kamraju (2023) expounded upon the concept of integrated livelihoods, elucidating its multifaceted nature. They posited that integrated livelihoods encompass a range of interventions aimed at fostering holistic development. These interventions encompass various dimensions, including income-generating activities, skill enhancement, access to education and healthcare, environmental preservation, and the establishment of robust social support networks. By integrating these diverse elements, individuals are provided with comprehensive support to enhance their overall well-being and livelihood prospects. The findings of Roscher et al. (2023) suggest that the adoption of multiple income-generating activities can serve as a viable strategy for individuals and communities to mitigate the adverse effects of economic shocks and external risks. By diversifying their sources of income, individuals can enhance their resilience and reduce their vulnerability to unforeseen circumstances. The concept of an integrated livelihood, as proposed by Roscher et al. (2023), emphasises the importance of incorporating various income-generating activities into one's economic portfolio. This approach recognises that relying solely on a single source of income can expose individuals and communities to heightened vulnerability, as any disruption or downturn in that particular sector can have severe consequences. Engaging in multiple income-generating activities offers several advantages in terms of reducing vulnerability. Firstly, it provides individuals with a broader range of income streams, thereby spreading the risk associated with economic shocks. For instance, if one activity experiences a decline in profitability, individuals can rely on alternative sources of income to sustain their livelihoods. Furthermore, diversifying income-generating activities can also enhance the adaptive capacity of individuals and communities. The prioritisation of integrating sustainable livelihood activities is of utmost importance, as it serves as a fundamental component in ensuring the long-term viability of livelihoods. The concept of resilience also emerges as an indispensable factor in the sustenance of livelihoods.

### ***Factors Affecting the Effectiveness of Integrated Approaches to Sustainable Livelihoods***

This study investigates the various factors that influence the efficacy of integrated approaches in promoting sustainable livelihoods. By examining the interplay between different elements, this investigation aims to shed understanding of the complex dynamics that shape the outcomes of such interventions. The findings of this study contribute to the existing body of knowledge on sustainable development and provide valuable insights for policymakers and practitioners working in the field. The efficacy of integrated approaches to sustainable livelihoods is contingent upon the confluence of multiple factors. The efficacy of integrated approaches in promoting sustainable livelihoods is contingent upon a multitude of factors. The careful analysis and incorporation of these strategic factors can yield a significant and long-lasting

effect on improving livelihoods and fostering sustainable development by means of development initiatives.

### ***Community Engagement***

The concept of community engagement has garnered significant attention in recent years, as scholars and practitioners recognise its potential to foster positive social change and enhance the well-being of rural communities. The focal point of development lies in community engagement, wherein communities serve as valuable assets and their active involvement constitutes a vital component of integrated strategies for fostering sustainable livelihoods. The term "community" encompasses a conceptual framework in which a collective of individuals, interconnected through social networks, share common cultural norms and identities, and reside within a shared geographic locality. This community serves as a significant cohort of stakeholders in the process of planning and executing development initiatives (Azman et al., 2011; Chege, 2023). The active involvement of community members in development initiatives provides valuable insights for development practitioners regarding the unique livelihood challenges faced by the community. This participatory approach enables practitioners to customise their interventions in a manner that effectively addresses these specific issues. By engaging with the community, practitioners can better understand the nuances of their livelihood concerns and design interventions that are contextually appropriate and responsive to their needs. This collaborative approach fosters a sense of ownership and empowerment among community members, as they are actively involved in shaping the development interventions that directly impact their lives. Furthermore, community participation enhances the sustainability and long-term success of development initiatives, as interventions are more likely to be embraced and supported by the community when they are tailored to their specific circumstances. Overall, community participation serves as a crucial mechanism for development practitioners to gain valuable insights and effectively address the livelihood challenges faced by the community. The significance of grassroots community engagement cannot be overstated in its role of fostering self-reliance and subsequently enhancing the standard of living among residents (Ali, Akhtar, & Hussain, 2023; Sharma, Jagtap, & Rao, 2022). The observed phenomenon can be attributed to the active engagement of the community, which serves to cultivate a sense of ownership, guarantee the applicability of interventions, and enhance the likelihood of achieving enduring success and sustainability. In a recent study conducted by Rahman et al. (2022), the significance of ecotourism development and community participation in attaining sustainable development was examined. The findings revealed that ecotourism development plays a crucial role in fostering economic, social, and environmental sustainability, both directly and indirectly. The study underscored the direct contributions of ecotourism development towards sustainable development. It was observed that the growth of ecotourism initiatives positively impacted the economic well-being of local communities. This was evident through the generation of employment opportunities, income diversification, and the stimulation of local businesses. Moreover, ecotourism development was found to enhance social sustainability by fostering cultural preservation, promoting community empowerment, and facilitating intercultural exchange between tourists and locals. Furthermore, the study shed light on the indirect contributions of ecotourism development towards sustainable development. It was revealed that the promotion of

ecotourism led to the conservation and preservation of natural resources and ecosystems. This was achieved through the implementation of sustainable practises, such as responsible tourism guidelines, waste management strategies, and biodiversity conservation efforts. Consequently, the environmental sustainability of the region was bolstered, ensuring the long-term viability of ecotourism activities. In addition to ecotourism development, the study emphasised the crucial role of community participation in achieving sustainable development. The level of community participation is contingent upon the innate allure and drive of individuals to engage in various endeavours that have the potential to shape the overall quality of their existence. This encompasses factors such as their level of consciousness and enthusiasm (Ali et al., 2022; Rasoolimanesh & Jaafar, 2016). The significance of community participation in facilitating effective livelihood intervention initiatives has been widely acknowledged by numerous scholars. However, it is crucial to recognise that certain factors have been identified more recently, which may hinder the potential for promoting sustainable livelihoods in rural settings. These non-participation factors pose a significant challenge to the successful implementation of such initiatives. In their seminal study, Setokoe and Ramukumba (2022) made a significant observation regarding the dearth of knowledge, information, and understanding pertaining to development within the community. This finding sheds light on a critical issue that warrants attention and intervention. The researchers' identification of this knowledge gap underscores the importance of addressing this deficiency to foster informed decision-making and promote sustainable development within the community. Further research and targeted educational initiatives are necessary to bridge this gap and empower community members with the necessary knowledge and understanding to actively participate in and contribute to the development process. The present issue is further compounded by the prevailing low levels of education and literacy observed among the individuals comprising the community. In the study conducted by Homels et al. (2019), it was found that in order to achieve optimal community participation, it is imperative to provide the community with comprehensive information and education regarding development initiatives. Furthermore, it is crucial to establish a robust support system that enables individuals to actively engage in livelihood initiatives within their respective localities. These findings underscore the significance of knowledge dissemination and the provision of necessary resources to foster community involvement in developmental endeavours. The success of community participation in developmental activities hinges upon the imperative of local community integration, which plays a pivotal role in addressing and mitigating the profound social, economic, and environmental challenges that communities face, thereby averting their detrimental consequences. The findings of this study suggest that the evaluation of community participation in development should extend beyond a mere quantification of the number of individuals involved. Instead, it is crucial to consider the tangible benefits that such participation brings to local communities at the grassroots level. As argued by Lucky (2016), a comprehensive assessment of community participation should encompass an analysis of the positive outcomes and impacts that result from this engagement. By adopting this approach, policymakers and practitioners can gain a deeper understanding of the true effectiveness and value of community participation initiatives in fostering sustainable development. The existing body of literature unequivocally underscores the significance of community participation in development endeavours, particularly in rural regions, as the fundamental pillar of sustainable development.

### ***Local and indigenous knowledge (LIK) considerations***

The present study delves into the critical aspect of local and indigenous knowledge considerations. The importance of local and indigenous knowledge (LIK) in enhancing the welfare of rural communities has gained increasing recognition (Lam et al., 2020). The present investigation acknowledges the findings of previous studies, which have highlighted the significance of possessing crucial insights into local customs, traditions, and social dynamics for the successful execution of projects (Edwards et al., 2019; Westoby et al., 2021). According to Franco and Tracey (2019), it is evident that projects which are in line with the values and requirements of the local communities have a higher probability of being accepted and maintained. This finding suggests that community engagement and understanding of the needs and aspirations of the local population are crucial factors in the success and longevity of projects. The Local Indigenous Knowledge (LIK) system encompasses a range of traditional practises that are closely intertwined with agriculture, natural resource management, and various other livelihood activities. These practises have been developed and passed down through generations, serving as a valuable repository of knowledge and wisdom within indigenous communities. By integrating LIK into contemporary approaches to sustainable development, there is potential for enhancing the resilience and effectiveness of these livelihood activities (Saliman & Swee Kiong, 2023). Furthermore, the incorporation of LIK can contribute to the preservation and promotion of indigenous cultures and identities, fostering a sense of pride and empowerment among indigenous communities. The knowledge in question serves as a dynamic and indispensable resource for individuals residing in rural areas, offering valuable guidance across various facets of their everyday existence (Ford et al., 2020; Skroblin et al., 2021). The development and communication of Local Indigenous Knowledge (LIK) within communities is a crucial process that aims to enhance their agricultural and other livelihood practises. By drawing upon their collective wisdom and experiences, communities are able to adapt and refine their knowledge systems to better align with their specific needs and circumstances. This iterative process of knowledge exchange and transmission plays a vital role in ensuring the sustainability and resilience. In accordance with the findings of Balehegn et al. (2019), it is evident that the concept of Local Indigenous Knowledge (LIK) is derived from a meticulous process of observing the surrounding conditions, conducting experiments, and subsequently adapting to the ecological responses. This approach allows individuals to develop a comprehensive understanding of their local environment and its dynamics. By engaging in systematic observation, experimentation, and adaptation, local communities are able to accumulate a wealth of knowledge that is specific to their unique ecological context. The utilisation of LIK thus serves as a valuable resource for addressing local challenges and promoting sustainable practises within these communities. The integration of Indigenous Knowledge Systems (IKS) into mainstream discussions has been a subject of inquiry among scholars. Chikaire et al. (2012) argue that the incorporation of IKS is crucial in developing culturally appropriate solutions for the communities being served. Historically, there has been a tendency to overlook this knowledge, leading to the implementation of development solutions that failed to adequately address the unique economic and cultural requirements of specific communities. The LIK method, as evidenced by the works of Brondzio et al. (2021) and Hill et al. (2020), has emerged as a fundamental framework that underpins a wide range of activities, including but not limited to agriculture, environmental protection, education, and customary

law. These studies highlight the significance and versatility of the LIK method in various fields, emphasising its potential to inform and guide decision-making processes in diverse contexts. By drawing upon the insights provided by Brondzio et al. (2021) and Hill et al. (2020), it becomes evident that the LIK method has become an indispensable tool for addressing complex challenges and promoting sustainable practises across multiple sectors. In accordance with the findings of Hodgson (2017), it has been observed that local communities employ customary rights as a means to resolve land disputes that emerge as a result of conflicting land claims. The findings of Masoga and Shokane (2019) suggest that incorporating local perspectives into conventional strategies can lead to more effective interventions that address community needs and promote sustainable livelihoods. This aligns with previous research that highlights the importance of considering local knowledge and practises in development initiatives (Masoga & Shokane, 2019). By combining these two approaches, practitioners can enhance the relevance and impact of their interventions, ultimately contributing to the long-term well-being of communities. Furthermore, it has been suggested by Fang (2013) that the lack of comprehension regarding indigenous concepts can lead to precarious developmental outcomes. The findings of this comprehensive analysis reveal a consistent pattern across all studies, indicating a widespread incorporation of cultural and local knowledge into rural lifestyles. The present study posits that the act of recognition holds the potential to bestow upon individuals a sense of empowerment, leading to an elevation in their self-esteem. Consequently, this enhanced self-perception is expected to equip individuals with the necessary capabilities to actively participate in decision-making processes. Multiple studies have provided evidence supporting the notion that in order to effectively integrate a cultural and indigenous perspective, it is imperative to actively involve the local population's knowledge and grasp the interrelatedness of practical, social, and cultural contexts (Priyadarshini & Abhilash, 2019; Risiro et al., 2013). Hence, it is of utmost importance for stakeholders involved in development to critically reassess cultural assets and incorporate them into their endeavours, encompassing both the theoretical and practical dimensions (Ma et al., 2012). In light of this analysis, it is evident that the adoption of integrated approaches that consider existing knowledge and build upon it can yield significant advantages in terms of effectively engaging and benefiting local communities. By incorporating various perspectives and leveraging existing expertise, these approaches demonstrate a higher likelihood of achieving successful outcomes. The integration of diverse knowledge sources allows for a more comprehensive understanding of the needs and aspirations of local communities, thereby enabling the development of tailored strategies that align with their specific contexts. Consequently, the implementation of such integrated approaches holds promise for fostering meaningful and sustainable community engagement, ultimately leading to enhanced benefits for all stakeholders involved. The disregard or underestimation of customary practises can result in resistance and a decrease in the effectiveness of development interventions.

### ***Gender Inclusivity***

The topic of gender inclusivity has garnered significant attention. The adoption of integrated approaches that effectively address the distinct needs and capabilities of both men and women in the context of rural development is of utmost importance. By recognising and accommodating the specific requirements and potentials of both genders, a more

comprehensive and equitable approach to rural development can be achieved. This acknowledgement is crucial as it allows for the creation of tailored strategies and interventions that consider the diverse roles, responsibilities, and contributions of men and women in rural communities. By embracing an inclusive and gender-responsive approach, rural development initiatives can effectively harness the full potential of all community members, leading to more sustainable and impactful outcomes. The examination of gender patterns and their sustainable livelihood roles within the context of rural life is of paramount importance, as evidenced by previous research findings. The study conducted by Alarcon and Sato (2019) sheds light on the disparities in access to livelihood sectors between women and men in rural families. The findings indicate that gender plays a significant role in determining the opportunities available to individuals within these communities. The researchers observed that women and men in rural areas face distinct challenges when it comes to accessing livelihood sectors. These challenges are rooted in traditional gender roles and societal norms that perpetuate gender inequality. As a result, women often find themselves confined to sectors that are considered more "feminine" or less economically lucrative, such as agriculture or informal work. On the other hand, men tend to have greater access to sectors that are perceived as more prestigious or financially rewarding, such as business or skilled labor. In a recent study conducted by Agrawal (2021), it was observed that the accessibility and inclination towards labour markets among both men and women are significantly influenced by cultural factors, gender-based occupational segregation, and familial responsibilities. These findings shed light on the complex interplay of various societal elements that shape individuals' engagement with the labour force. In addition, it is worth noting that throughout history, numerous societies have employed gender as a mechanism for delineating familial responsibilities. Consequently, specific tasks have traditionally been assigned exclusively to either women or men within these societies. The study conducted by Jabeen et al. (2020) highlights the significant role that gender inequalities play in driving innovation. It is observed that men are motivated to enhance household income, while women seek to expand family livelihood options through various means such as animal husbandry, crop cultivation, and crafting. The pursuit of increased household income by men can be seen as a response to the prevailing gender inequalities. In societies where men are traditionally expected to be the primary breadwinners, they are driven to explore innovative ways to generate more income for their households. This drive for economic advancement can lead to the development of new ideas, technologies, and practises that contribute to overall societal progress. On the other hand, women, who often face limited opportunities for economic empowerment due to gender disparities, turn to alternative means of livelihood such as animal husbandry, crop cultivation, and crafting. These activities allow women to not only contribute to the family income but also broaden their skill sets and knowledge base. By engaging in these pursuits, women are able to challenge traditional gender roles and expand their roles within the household and community. The findings of this study shed light on the intricate relationship between gender inequalities, innovation, and livelihood strategies. In a recent study conducted by Basu and Galie (2021), it was observed that women occupy various subject positions in relation to economic and environmental sustainability. The findings suggest that women exhibit a greater inclination towards combining these two aspects, as compared to men. This inclination is further reflected in their openness towards engaging in commercial ventures that offer greater opportunities for diversification. It is worth noting that

this preference for diversification may arise due to the dominance of men in the realm of traditional farming, which limits women's control over such practises. In a study conducted by Akthar et al. (2018), it was observed that women have a significant presence and contribution in the agricultural sector. The research revealed that approximately twenty million women actively engage in various aspects of agricultural production, encompassing the cultivation of crops, vegetables, and livestock. These findings shed light on the pivotal role played by women in this sector, emphasising their indispensable involvement in agricultural activities. In addition, it is imperative to emphasise the significance of incorporating gender-awareness capacity programmes within systematic approaches in order to effectively promote gender integration (Stacey et al., 2019). The present study underscores the pivotal role played by the inclusion of women and the transformation of gender relations in effectively tackling poverty and attaining gender equity and equality for sustainable livelihood. This finding aligns with the scholarly work conducted by Khan et al. (2022). By recognising the significance of women's participation and reshaping the dynamics between men and women, societies can make substantial strides towards eradicating poverty and fostering a more equitable and sustainable future. In addition, the scholarly works of Race et al. (2019) and Mariyono (2019) have contributed to the understanding that women play a crucial role as the foundation of rural households, undertaking responsibilities in terms of both familial and agricultural labour. These findings shed light on the significant contributions made by women in sustaining the functioning and productivity of rural communities. Furthermore, the study conducted by Alozie and Isiwu (2020) serves to reinforce the significance of women's involvement in the marketing of agricultural products. Notably, the research findings indicate that a substantial proportion of fruit and vegetable stalls are predominantly owned and operated by women. This observation underscores the pivotal role played by women in this particular sector. Moreover, the observed disparity in gender further elucidates the distinct approaches employed by individuals when making decisions that directly impact their means of sustenance and well-being. The present study examined gender differences in reward-seeking decisions, specifically focusing on the disparity between men and women. The men tend to exhibit higher levels of reward-seeking behaviour in comparison to women. This observation aligns with previous research suggesting that gender plays a significant role in decision-making processes related to seeking rewards. The implications of these results warrant further investigation into the underlying factors contributing to this gender disparity in reward-seeking decisions. Future studies should explore potential biological, psychological, and sociocultural factors that may contribute to these observed gender differences. The present study sought to investigate the gender differences in risk aversion among individuals when making decisions under conditions of risk. The findings of this study indicate that, on average, men tend to exhibit greater risk aversion compared to women. This observation aligns with previous research that has consistently reported a gender disparity in risk-taking behavior. In addition, it has been observed that men exhibit greater efficiency and display a more pronounced inclination towards goal-oriented behaviour, as noted by Genre (2021). The present analysis encompasses a comprehensive examination of prominent investigations, which collectively elucidate the effects of involving both men and women in the process of family decision-making. The findings of these studies reveal that such inclusive practises yield several noteworthy outcomes, including the expansion of perspectives, the diversification of talent, and the mitigation of conflicts. Furthermore, it is noteworthy to

mention that the presence of female leadership plays a significant role in the advantages derived from diversity. This can be attributed to the fact that women possess a leadership style that enables them to effectively navigate complex interpersonal dynamics, owing to their heightened attentiveness towards the needs of others (Carnegie, 2020; Weler et al., 2018). In their seminal work, Frankenberger et al. (2002) shed light on the crucial role played by gender relations and elements in shaping job security within family units. The authors aptly emphasise that a comprehensive comprehension of this intricate interplay is indispensable for gaining insights into the dynamics of job security. By highlighting the significance of gender-related factors, Frankenberger et al. (2002) underscore the need to consider these aspects when examining the multifaceted nature of job security within familial contexts. The authors propose that the present study should incorporate an examination of various factors, including but not limited to the gendered division of labour, access to goods and enterprises, control over assets, power dynamics, and rights. The present study aims to discern the various techniques and activities that are associated with enhanced value. Additionally, it seeks to investigate the potential differential effects of a diverse set of proposed mediation options. In a study conducted by Loison (2019), it was found that the alterations observed in the gender and livelihood structure can be primarily attributed to the escalating conflicts arising from the intersection of employment requirements and traditional gender roles within family dynamics. The dynamic evolution of women's status is characterised by the progressive attainment of equitable access to decision-making processes and resources, the eradication of discriminatory practises in employment, and the acquisition of land ownership rights. The existing literature, as evidenced by Aayog (2017), Dzanku (2019), and Xie et al. (2020), highlights the pressing necessity to enhance the circumstances of women across different societal strata. This imperative arises from the imperative to provide women with increased avenues for participating in income-generating endeavours. Through a comprehensive analysis of the significance of gender inclusivity, this review paper highlights the imperative of providing fair and equal access to resources, opportunities, and decision-making authority in order to foster the establishment of sustainable livelihoods.

### ***Environmental Sustainability***

The concept of environmental sustainability has garnered significant attention in recent years, as societies around the world grapple with the pressing need to address and mitigate the adverse impacts of environmental. The preservation of environmental sustainability plays a crucial role in the endeavour to achieve sustainable rural livelihoods, as it serves as a fundamental mechanism to prevent the loss of developmental advantages and ecological degradation. The investigation of the environmental dimension pertaining to the ramifications on natural resources, biodiversity, and ecosystems constitutes a noteworthy area of scholarly inquiry, with particular emphasis on the consequences of developmental activities (Aberilla et al., 2020; Sánchez-Ollero et al., 2022). Rural communities are presently confronted with a multitude of challenges that are intrinsically tied to the environmental predicament. These challenges encompass, but are not limited to, the far-reaching consequences of climate change, the degradation of land, the rampant deforestation, the alarming loss of biodiversity, and the disintegration of natural resources. Consequently, the individuals in question face an increased susceptibility to experiencing poverty. The susceptibility of an economy adhering to

conventional agricultural methods to natural disasters has been expounded upon by Mihai and Latu (2020). Furthermore, it is imperative to acknowledge that the advancement of infrastructure may engender adverse consequences on biodiversity, ecological habitats, and the preservation of original visual resources. Simultaneously, this progression renders the destination more susceptible to the detrimental effects of natural disasters during periods of extreme weather conditions. The occurrence of adverse phenomena, such as soil erosion and landslides, has been reported in the literature (Razzaq et al., 2021; Thacker et al., 2019). The deleterious consequences of environmental pollution, stemming from a multitude of sources including agricultural practises, mining operations, extractive industries, urban expansion, indiscriminate waste disposal, and the proliferation of infrastructure and energy projects, have been observed to disproportionately impact communities residing in close proximity (Fernández et al., 2020).

Considerable focus has been dedicated to the preservation and judicious utilisation of natural resources, encompassing but not limited to land, water, forests, and biodiversity. This statement asserts that the implementation of a certain measure ensures the preservation of resources as the primary means of sustenance for rural communities. Numerous scholarly investigations have elucidated the pivotal role played by natural resources, namely land, water, and forests, in bolstering the sustenance and affluence of rural communities. The significance of the surrounding environment in the daily existence of indigenous populations in Peninsular Malaysia, Sabah, and Sarawak has been extensively examined by Abas et al. (2020) and Garnet et al. (2022). These studies shed light on the pivotal role that the natural surroundings play in shaping the lives and livelihoods of these communities. The Iban community residing in the state of Sarawak, Malaysia, relies heavily on the utilisation of their surrounding natural resources and land as a means of sustenance and livelihood. The indigenous community under study demonstrates a self-sustaining lifestyle through the utilisation of hunting, fishing, and gathering practises to procure essential resources from the surrounding forest ecosystem. The acquisition of land plays a pivotal role in determining both the financial and social standing of individuals. The cultural and social heritage of the community under study is undeniably influenced to a great extent by the pivotal role it plays in the everyday lives of its members. The present study examines the deleterious consequences of development initiatives, specifically those pertaining to logging, hydroelectric dams, and oil palm plantations, on the ecological integrity of Sarawak. The adverse effects of these projects have been observed to disproportionately affect the Iban and other indigenous communities residing in the region (Cramb, 2012; Hoe et al., 2018). The scholarly discourse posits that the facilitation of sustainable livelihood initiatives within rural communities confers upon them the agency to actively engage in their own developmental processes (Li & Liu, 2019; Yin et al., 2022). The integration of environmental sustainability into rural livelihood development presents promising prospects for fostering economic growth, social equity, and ecological balance. The aforementioned approach, as elucidated by Surya et al. (2021) and Yang et al. (2021), serves to foster the overall welfare and fortitude of rural communities, thereby engendering a trajectory towards a sustainable and prosperous future.

### ***Strategic rural partnership***

The concept of strategic rural partnership has emerged as a significant framework for addressing the challenges faced by rural communities. This approach involves the collaboration and cooperation of various stakeholders, including government agencies and non-profit organisations. In order to effectively realise prosperous livelihood initiatives within rural regions, it is imperative to foster a spirit of collaboration and coordination among the diverse array of stakeholders engaged in the pursuit of sustainable development in these areas. The enhancement of living conditions within rural societies extends beyond the confines of individual households, as it necessitates the establishment of strategic partnerships (Usadolo & Caldwell, 2016). The present discourse highlights the potential advantages of fostering collaborative endeavours among diverse stakeholders, encompassing governmental bodies, non-governmental organisations (NGOs), local communities, and the private sector. Such collective actions hold promise in effectively advancing the pursuit of sustainable development objectives, particularly in the context of poverty alleviation. In their respective works, Horlings et al. (2018) and Yang (2018) posit that the involvement of grassroots communities and their leaders is of paramount importance in the decision-making processes pertaining to development initiatives and livelihood activities within their localities. The efficacy of a developmental endeavour in rural regions is predominantly contingent upon the harmonious amalgamation of diverse stakeholders, encompassing village leaders, village organisations, and household heads, particularly in domains that significantly impact the sustenance of the community (McComb et al., 2017; Rustinsyah & Prasetyo, 2019; Sisto et al., 2018).

The promotion of sustainable development in rural areas is a crucial responsibility that falls upon governments at various levels, encompassing federal, state, and local entities. The attainment of this objective necessitates the establishment of comprehensive policies that encompass the domains of agriculture, the environment, land use, and infrastructure development. The primary objective of the government is to address the prevailing economic disparity between urban and rural regions. This endeavour is pursued through the implementation of measures aimed at bolstering both social and physical infrastructure. Additionally, the government seeks to elevate the quality of rural education and health facilities, thereby enhancing the overall standard of living for rural inhabitants. Since achieving independence, Malaysia has consistently demonstrated a steadfast commitment to the advancement of rural development. This unwavering dedication is evident through the government's deliberate focus on bolstering the rural landscape by means of facilitating the provision of essential infrastructure, fostering educational initiatives, offering comprehensive training programmes, and creating ample employment prospects. Scholars such as Dawood et al. (2019) and Shahar et al. (2019) have extensively examined and documented the significance of these endeavours in elevating the overall welfare of rural communities within the nation. In addition to the aforementioned considerations, it is imperative to acknowledge the indispensable role played by the private sector in facilitating financial investment, particularly within the domains of agriculture, agribusinesses, and rural industries. The introduction of novel technologies and innovations by private enterprises holds the potential to significantly augment agricultural productivity, market accessibility, and rural livelihoods. Various international development agencies, foundations, and non-governmental organisations (NGOs), alongside other funding organisations, extend financial assistance to initiatives and

endeavours focused on rural development. The provision of technical expertise, training, and capacity building by various organisations to local communities and government agencies has been identified as a means to enhance the efficacy and sustainability of development initiatives (Adenle et al., 2019; Castro-Arce & Vanclay, 2020). The achievement of rural sustainable development necessitates the establishment of a strategic alliance among various stakeholders, encompassing the government, private sector, funding organisations, and rural communities, each of which assumes distinct yet interdependent roles.

## CONCLUSIONS AND FURTHER RESEARCH

In summary, the field of integrated rural development remains a prominent area of academic inquiry and practical action aimed at addressing challenges pertaining to rural poverty and socioeconomic barriers. By conducting a comprehensive analysis and evaluation of the multiple factors that affect effectiveness, policymakers and development practitioners can devise and implement more robust and sustainable projects that have a beneficial influence on the well-being of rural communities. The advancement of sustainable livelihoods in rural areas requires the integration of multiple elements, such as community involvement, use of local and indigenous knowledge, inclusion of gender perspectives, emphasis on environmental sustainability, and establishment of strategic partnerships with rural stakeholders. The present analysis recognises the comprehensive approach that considers the interconnectedness of several factors that influence rural livelihoods. This statement underscores the importance of inclusive, participative, and environmentally conscious approaches to development. The inclusion of local stakeholders in decision-making processes enhances the possibility of development projects effectively aligning with their needs, objectives, and indigenous knowledge. Furthermore, the integration of gender inclusion plays a crucial role in demolishing outdated gender stereotypes and fostering the active participation of women in rural development initiatives. The integration of environmental considerations into the process of development planning serves to bolster resilience and ensure the enduring sustainability of livelihoods. Collaborative partnerships among diverse stakeholders foster the generation of innovative ideas, the sharing of resources, and the improvement of capacities, so enabling a comprehensive and enduring approach to the development process. Numerous academics have made significant contributions towards developing the fundamental principles required for a holistic comprehension of an integrated framework designed to advance sustainable rural lives. Despite the progress made in understanding the factors influencing the efficiency of integrated rural development, further research is needed in specific areas. Future research endeavours have the potential to build upon this existing groundwork, with the aim of improving approaches to get sustainable outcomes over an extended period of time. One potential research focus could be conducting a complete assessment of integrated interventions and their long-term impacts on the livelihoods of rural communities. This study would provide valuable information regarding the long-term sustainability and effectiveness of the proposed measures.

## REFERENCES

Abas, M. A., Amin, M. F. M., Wei, L. S., & Hassin, N. H. (2020). Community development model for poverty eradication of indigenous people in Malaysia. *International Journal of Society Systems Science*, 12(2), 151-164.

- Aberilla, J. M., Gallego-Schmid, A., Stamford, L., & Azapagic, A. (2020). Design and environmental sustainability assessment of small-scale off-grid energy systems for remote rural communities. *Applied Energy*, 258, 114004.
- Achmad, W., Chuang, H. M., Gunawan, U. P., Nadila, D., & Maulana, I. (2023). Community Empowerment through the Development of the Cisaat Tourism Village, Subang Regency. *Ilomata International Journal of Social Science*, 4(1), 30-39.
- Adenle, A. A., Wedig, K., & Azadi, H. (2019). Sustainable agriculture and food security in Africa: The role of innovative technologies and international organizations. *Technology in Society*, 58, 101143.
- Alam, M. F. B., Tushar, S. R., Zaman, S. M., Gonzalez, E. D. S., Bari, A. M., & Karmaker, C. L. (2023). Analysis of the drivers of Agriculture 4.0 implementation in the emerging economies: Implications towards sustainability and food security. *Green Technologies and Sustainability*, 1(2), 100021.
- Alarcón, J. M. S., & Sato, C. (2019). Enacting peasant moral community economies for sustainable livelihoods: A case of women-led cooperatives in rural Mexico. *World Development*, 115, 120-131.
- Ali, A., Akhtar, R., & Hussain, J. (2023). Unveiling High Mountain Communities' Perception of Climate Change Impact on Lives and Livelihoods in Gilgit-Baltistan: Evidence from People-Centric Approach. *Environmental Communication*, 1-16.
- Ali, M. A., & Kamraju, M. (2023). The Role of Women in Rural Development Programs. *ASEAN Journal of Community Service and Education*, 2(1), 67-84.
- Ali, M. B., Quaddus, M., Rabbanee, F. K., & Shanka, T. (2022). Community participation and quality of life in nature-based tourism: Exploring the antecedents and moderators. *Journal of Hospitality and Tourism Research*, 46(3), 630-661.
- Azman, A. L. N. M., Abdullah, N. A., Shah, S. K. N., & Puteh, F. (2023). Strategic Analysis of Climate Change and Food Security In Malaysia. *Journal of Administrative Science*, 20(1), 51-77.
- Balehegn, M., Balehey, S., Fu, C., & Liang, W. (2019). Indigenous weather and climate forecasting knowledge among Afar pastoralists of north eastern Ethiopia: Role in adaptation to weather and climate variability. *Pastoralism*, 9(1), 1-14.
- Basu, P., & Galiè, A. (2021). Introduction to special issue: Gender and rural development: Sustainable livelihoods in a neoliberal context. *Sustainability*, 13(21), 12258.
- Brondízio, E. S., Aumeeruddy-Thomas, Y., Bates, P., Carino, J., Fernández-Llamazares, Á., Ferrari, M. F., ... & Shrestha, U. B. (2021). Locally based, regionally manifested, and globally relevant: Indigenous and local knowledge, values, and practices for nature. *Annual Review of Environment and Resources*, 46, 481-509.
- Bruno, J., Fernandez G, M., & Balgopal, M. (2021). An integrated livelihoods and well-being framework to understand northeastern Colorado ranchers' adaptive strategies. *Ecology and Society*, 26(4).
- Castro-Arce, K., & Vanclay, F. (2020). Transformative social innovation for sustainable rural development: An analytical framework to assist community-based initiatives. *Journal of Rural Studies*, 74, 45-54.
- Chan, J. K. L. (2023). Sustainable Rural Tourism Practices from the Local Tourism Stakeholders' Perspectives. *Global Business and Finance Review*, 28(3), 136.

- Chege, S. W. (2023). Building resilient communities by growing community assets, capacities, and trust. *Reimagining Civil Society Collaborations in Development*, 68.
- Choi, H. C., & Murray, I. (2010). Resident attitudes toward sustainable community tourism. *Journal of Sustainable Tourism*, 18(4), 575-594.
- Cramb, R.A (2012). *Beyond the Longhouse: Iban Shifting Cultivators Come to Town*. Singapore: NUS Press.
- Dawood, S. R. S., Ghazali, S., & Samat, N. (2019). Digital divide and poverty eradication in the rural region of the northern Peninsular Malaysia. *The Indonesian Journal of Geography*, 51(2), 67-77.
- Edwards, P., Sharma-Wallace, L., Barnard, T., Velarde, S. J., Warmenhoven, T., Fitzgerald, G., ... & Pohatu, P. (2019). Sustainable livelihoods approaches to inform government-local partnerships and decision-making in vulnerable environments. *New Zealand Geographer*, 75(2), 63-73.
- Fahad, S., Nguyen-Thi-Lan, H., Nguyen-Manh, D., Tran-Duc, H., & To-The, N. (2023). Analyzing the status of multidimensional poverty of rural households by using sustainable livelihood framework: Policy implications for economic growth. *Environmental Science and Pollution Research*, 30(6), 16106-16119.
- Fernández-Llamazares, Á., Garteizgogeoasoa, M., Basu, N., Brondizio, E. S., Cabeza, M., Martínez-Alier, J., ... & Reyes-García, V. (2020). A state-of-the-art review of indigenous peoples and environmental pollution. *Integrated Environmental Assessment and Management*, 16(3), 324-341.
- Ford, J. D., King, N., Galappaththi, E. K., Pearce, T., McDowell, G., & Harper, S. L. (2020). The resilience of indigenous peoples to environmental change. *One Earth*, 2(6), 532-543.
- Franco, I. B., & Tracey, J. (2019). Community capacity-building for sustainable development: Effectively striving towards achieving local community sustainability targets. *International Journal of Sustainability in Higher Education*, 20(4), 691-725.
- Gardner, E. M., Puad, A. S. A., Pereira, J. T., anak Tagi, J., anak Nyegang, S., Miun, P., ... & Zerega, N. J. (2022). Engagement with indigenous people preserves local knowledge and biodiversity alike. *Current Biology*, 32(11), R511-R512.
- Guo, Y., & Liu, Y. (2022). Sustainable poverty alleviation and green development in China's underdeveloped areas. *Journal of Geographical Sciences*, 32(1), 23-43.
- Hassan, M. A., Anuar Zabidi, N. A., Ramli, H., S Muthuveeran, A. A., & Abdullah, Y. A. (2021). The impact of movement control order on rural livelihood in Malaysia. *Journal of International Business, Economics and Entrepreneurship*, 6(2), 55-65.
- Hendratmi, A., Agustina, T. S., Sukmaningrum, P. S., & Widayanti, M. A. (2022). Livelihood strategies of women entrepreneurs in Indonesia. *Heliyon*, 8(9).
- Hill, R., Adem, Ç., Alangu, W. V., Molnár, Z., Aumeeruddy-Thomas, Y., Bridgewater, P., ... & Xue, D. (2020). Working with indigenous, local and scientific knowledge in assessments of nature and nature's linkages with people. *Current Opinion in Environmental Sustainability*, 43, 8-20.
- Hoe, K. C., Abd Wahab, H., Bakar, S. H. A., & Islam, M. R. (2018). Community participation for rural poverty alleviation: A case of the Iban community in Malaysia. *International Social Work*, 61(4), 518-536.

- Holmes, L., Cresswell, K., Williams, S., Parsons, S., Keane, A., Wilson, C., ... & Starling, B. (2019). Innovating public engagement and patient involvement through strategic collaboration and practice. *Research involvement and engagement*, 5, 1-12.
- Horlings, L. G., Roep, D., & Wellbrock, W. (2018). The Role of Leadership in Place-Based Development and Building Institutional Arrangements. *Local Economy*, 33(3), 245-268.
- HR, G., & Aithal, P. S. (2022). How to Choose an Appropriate Research Data Collection Method and Method Choice among Various Research Data Collection Methods and Method Choices During Ph. D. Program in India?. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 7(2), 455-489.
- Iqbal, A., Ramachandran, S., Siow, M. L., Subramaniam, T., & Afandi, S. H. M. (2022). Meaningful community participation for effective development of sustainable tourism: Bibliometric analysis towards a quintuple helix model. *Journal of Outdoor Recreation and Tourism*, 39, 100523.
- Jabeen, S., Haq, S., Jameel, A., Hussain, A., Asif, M., Hwang, J., & Jabeen, A. (2020). Impacts of rural women's traditional economic activities on household economy: Changing economic contributions through empowered women in rural Pakistan. *Sustainability*, 12(7), 2731.
- Kamarudin, K. H., Untari, R., & Rashid, M. F. (2020). Sustaining rural livelihood through entrepreneurship and creative village development: Malaysia and Indonesia experience. *Scientific Papers: Management, Economic Engineering in Agriculture and Rural Development*, 20, 303-309.
- Khan, T. A., Khan, F. A., Violinda, Q., Aasir, I., & Jian, S. (2020). Microfinance facility for rural women entrepreneurs in Pakistan: An empirical analysis. *Agriculture*, 10(3), 54.
- Khoa, B. T., Hung, B. P., & Hejsalem B, M. (2023). Qualitative research in social sciences: data collection, data analysis and report writing. *International Journal of Public Sector Performance Management*, 12(1-2), 187-209.
- Kunjuraman, V., & Hussin, R. (2017). Challenges of community-based homestay programme in Sabah, Malaysia: Hopeful or hopeless?. *Tourism Management Perspectives*, 21, 1-9.
- Lam, D. P., Hinz, E., Lang, D., Tengö, M., Wehrden, H., & Martín-López, B. (2020). Indigenous and local knowledge in sustainability transformations research: a literature review. *Ecology and Society*, 25(1).
- Li, Y., Westlund, H., & Liu, Y. (2019). Why some rural areas decline while some others not: An overview of rural evolution in the world. *Journal of Rural Studies*, 68, 135-143.
- Loison, S. A. (2019). Household livelihood diversification and gender: Panel evidence from rural Kenya. *Journal of Rural Studies*, 69, 156-172.
- Lucky, O. O. (2016). Significance of community participation in rural development. *International Journal of Agriculture and Earth Science*, 2(2), 44-53.
- Ma, X., Wang, R., Dai, M., & Ou, Y. (2021). The influence of culture on the sustainable livelihoods of households in rural tourism destinations. *Journal of Sustainable Tourism*, 29(8), 1235-1252.
- Mamokhere, J., & Meyer, D. F. (2023). Towards an Exploration of the Significance of Community Participation in the Integrated Development Planning Process in South Africa. *Social Sciences*, 12(5), 256.

- Man, M. N. S. B., & Manaf, H. A. (2022). A Systematic Literature Review on Smart City Project Initiatives for Rural Community Participation. *Journal of Social Transformation and Regional Development*, 4(2).
- Masoga, M. A., & Shokane, A. L. (2019). Indigenous knowledge systems and environmental social work education: Towards environmental sustainability. *Southern African Journal of Environmental Education*, 35.
- McComb, E. J., Boyd, S., & Boluk, K. (2017). Stakeholder collaboration: A means to the Success of Rural Tourism Destinations? A Critical Evaluation of The Existence of Stakeholder Collaboration Within the Mournes, Northern Ireland. *Tourism and Hospitality Research*, 17(3), 286-297.
- Mihai, F. C., & Iatu, C. (2020). Sustainable rural development under Agenda 2030. *Sustainability Assessment at the 21st century*, 9-18.
- Muhtar, E. A., Abdillah, A., Widianingsih, I., & Adikancana, Q. M. (2023). Smart villages, rural development and community vulnerability in Indonesia: A bibliometric analysis. *Cogent Social Sciences*, 9(1), 2219118.
- Ngah, R., Abdul Kadir, M. A. B., & Mohd Lajin, N. F. (2022). Assessing a rural community-based entrepreneurship in Malaysia: are we there yet? *ASEAN Entrepreneurship Journal (AEJ)*, 8(2), 21-25.
- Ngoc, N. M., Tien, N. H., Hieu, V. M., & Trang, T. T. T. (2023). Sustainable Integration in Vietnam's Tourism Industry. *World review of entrepreneurship management and sustainable development*.
- Nguyen, T. T., Nguyen, T. T., & Grote, U. (2022). Internet use, natural resource extraction and poverty reduction in rural Thailand. *Ecological Economics*, 196, 107417.
- Noor, H. M., & Ramin, A. K. (2012). Preliminary study of rural entrepreneurship development program in Malaysia. *Journal of global entrepreneurship*.
- Panakaje, N., Rahiman, H. U., Parvin, S. R., Kulal, A., & Siddiq, A. (2023). Socio-economic empowerment in rural India: Do financial inclusion and literacy matters? *Cogent Social Sciences*, 9(1), 2225829.
- Peng, W., Zheng, H., Robinson, B. E., Li, C., & Li, R. (2022). Comparing the importance of farming resource endowments and agricultural livelihood diversification for agricultural sustainability from the perspective of the food–energy–water nexus. *Journal of Cleaner Production*, 380, 135193.
- Priyadarshini, P., & Abhilash, P. C. (2019). Promoting tribal communities and indigenous knowledge as potential solutions for the sustainable development of India. *Environmental Development*, 32, 100459.
- Rahman, M. K., Masud, M. M., Akhtar, R., & Hossain, M. M. (2022). Impact of community participation on sustainable development of marine protected areas: Assessment of ecotourism development. *International Journal of Tourism Research*, 24(1), 33-43.
- Rashid, M. F. A., Muhamad, A. K., Rashid, K., Ahmad, A. L., & Azman, M. A. A. (2021). Formulation of a Malaysia modern rural development framework: Synergising rural for change. *Planning Malaysia*, 19.
- Rasoolimanesh, S. M., & Jaafar, M. (2016). Community participation toward tourism development and conservation program in rural world heritage sites. In *Tourism-from empirical research towards practical application*. *IntechOpen*.

- Razzaq, A., Ajaz, T., Li, J. C., Irfan, M., & Suksatan, W. (2021). Investigating the asymmetric linkages between infrastructure development, green innovation, and consumption-based material footprint: Novel empirical estimations from highly resource-consuming economies. *Resources Policy*, 74, 102302.
- Roscher, M. B., Allison, E. H., Mills, D. J., Eriksson, H., Hellebrandt, D., & Andrew, N. L. (2022). Sustainable development outcomes of livelihood diversification in small-scale fisheries. *Fish and Fisheries*, 23(4), 910-925.
- Rother, E. T. (2007). Systematic literature review X narrative review. *Acta paulista de enfermagem*, 20, V-VI.
- Ruggiano, N., & Perry, T. E. (2019). Conducting secondary analysis of qualitative data: Should we, can we, and how? *Qualitative Social Work*, 18(1), 81-97.
- Rustiadi, E., Pribadi, D. O., Pravitasari, A. E., Nurdin, M., Iman, L. S., Panuju, D. R. & Anthony, D. (2023). Developing a precision spatial information system of smallholder oil palm plantations for sustainable rural development. In IOP Conference Series: Earth and Environmental Science (Vol. 1133, No. 1, p. 012072). IOP Publishing.
- Rustinsyah, R., & Prasetyo, R. A. (2019). Stakeholder Engagement in A Water User Association for Agricultural Irrigation Management in the Villages in Indonesia. *Journal of Water and Land Development*, 12(2), 156-161.
- Saliman, L., & Swee-Kiong, W. (2023). Enhancing Rural Wellbeing: Unravelling the Impact of Economic Diversification in Sarawak. *Journal of Production, Operations Management and Economics (JPOME)*, 3(06), 21-28.
- Sánchez-Ollero, J. L., Garcia-Pozo, A., & Mondéjar-Jiménez, J. (2022). Impacts of environmental sustainability measures on rural accommodation. *Journal of Hospitality and Tourism Research*, 46(7), 1241-1256.
- Saputro, K. E. A., Hasim, Karlinasari, L., & Beik, I. S. (2023). Evaluation of Sustainable Rural Tourism Development with an Integrated Approach Using MDS and ANP Methods: Case Study in Ciamis, West Java, Indonesia. *Sustainability*, 15(3), 1835.
- Sarkki, S., Dalla Torre, C., Fransala, J., Živojinović, I., Ludvig, A., Górriz-Mifsud, E., ... & Nijnik, M. (2021). Reconstructive social innovation cycles in women-led initiatives in rural areas. *Sustainability*, 13(3), 1231.
- Schnurr, J., Holtz, S., Armstrong, G., & Bernard, A. K. (2023). The cornerstone of development: integrating environmental, social, and economic policies. CRC Press.
- Setokoe, T. J., & Ramukumba, T. (2020, August 26). Challenges Of Community Participation In Community-Based Tourism In Rural Areas. *Wit Press*.
- Shahar, S., Lau, H., Puteh, S. E. W., Amara, S., & Razak, N. A. (2019). Health, access and nutritional issues among low-income population in Malaysia: introductory note. *BMC Public Health*, 19, 1-5.
- Shahar, S., Vanoh, D., Mat Ludin, A. F., Singh, D. K. A., & Hamid, T. A. (2019). Factors associated with poor socioeconomic status among Malaysian older adults: An analysis according to urban and rural settings. *BMC Public Health*, 19(4), 1-12.
- Shahbaz, P., ul Haq, S., Abbas, A., Batool, Z., Alotaibi, B. A., & Nayak, R. K. (2022). Adoption of Climate Smart Agricultural Practices through Women Involvement in Decision Making Process: Exploring the Role of Empowerment and Innovativeness. *Agriculture*, 12(8), 1161.

- Sharizan, S., Redzuan, N. H., & Rosman, R. (2021). Issues and challenges of financial inclusion among low-income earners in rural areas of Malaysia. *Turkish Journal of Islamic Economics*, 8.
- Sharma, R., Jagtap, S., & Rao, P. (2022). Understanding Maharashtra Coastal Community's Perceptions and Livelihood Resilience to Climate Change Using the Community Participatory Approach. *International Journal of Climate Change: Impacts & Responses*, 14(2).
- Shi, Z., & Qamruzzaman, M. (2022). Re-visiting the role of education on poverty through the channel of financial inclusion: Evidence from lower-income and lower-middle-income countries. *Frontiers in Environmental Science*, 10, 873652.
- Simpson, M. C. (2009). An integrated approach to assess the impacts of tourism on community development and sustainable livelihoods. *Community development journal*, 44(2), 186-208.
- Singh, R. K., Bhardwaj, R., Sureja, A. K., Kumar, A., Singh, A., Hazarika, B. N. & Rallen, O. (2022). Livelihood resilience in the face of multiple stressors: biocultural resource-based adaptive strategies among the vulnerable communities. *Sustainability Science*, 1-19.
- Sisto, R., Lopolito, A., & Van Vliet, M. (2018). Stakeholder Participation in Planning Rural Development Strategies. *Land Use Policy*, 70, 442-450.
- Skroblin, A., Carboon, T., Bidu, G., Chapman, N., Miller, M., Taylor, K., ... & Wintle, B. A. (2021). Including indigenous knowledge in species distribution modeling for increased ecological insights. *Conservation Biology*, 35(2), 587-597.
- Stacey, N., Gibson, E., Loneragan, N. R., Warren, C., Wiryawan, B., Adhuri, D., & Fitriana, R. (2019). Enhancing coastal livelihoods in Indonesia: an evaluation of recent initiatives on gender, women and sustainable livelihoods in small-scale fisheries. *Maritime Studies*, 18, 359-371.
- Surya, B., Saleh, H., Idris, M., & Ahmad, D. N. A. (2021). Rural agribusiness-based agropolitan area development and environmental management sustainability: Regional economic growth perspectives. *International journal of energy economics and policy*, 11(1), 142-157.
- Syafar, M., & Ulumi, H. F. B. (2021). From Community Capital to Sustainable Rural Livelihood: Exploring Green Development Program in Masoso, Indonesia. *Jurnal Pemberdayaan Masyarakat: Media Pemikiran dan Dakwah Pembangunan*, 5(1), 79-108.
- Thacker, S., Adshead, D., Fay, M., Hallegatte, S., Harvey, M., Meller, H., ... & Hall, J. W. (2019). Infrastructure for sustainable development. *Nature Sustainability*, 2(4), 324-331.
- Tran, D. D., Huu, L. H., Hoang, L. P., Pham, T. D., & Nguyen, A. H. (2021). Sustainability of rice-based livelihoods in the upper floodplains of Vietnamese Mekong Delta: Prospects and challenges. *Agricultural Water Management*, 243, 106495.
- Usadolo, S. E., & Caldwell, M. (2016). A Stakeholder Approach to Community Participation in A Rural Development Project. *Sage Open*, 6(1), 215-824.
- Wang, R., Eisenack, K., & Tan, R. (2019). Sustainable rural renewal in China: archetypical patterns. *Ecology and Society*, 24(3).
- Westoby, R., Gardiner, S., Carter, R. W., & Scott, N. (2021). Sustainable livelihoods from tourism in the "10 New Balis" in Indonesia. *Asia Pacific Journal of Tourism Research*, 26(6), 702-716.
- Xiao, Y., & Watson, M. (2019). Guidance on conducting a systematic literature review. *Journal of planning education and research*, 39(1), 93-112.

- Yadav, S. K., Banerjee, A., Jhariya, M. K., Meena, R. S., Raj, A., Khan, N., ... & Sheoran, S. (2022). Environmental education for sustainable development. In *Natural Resources Conservation and Advances for Sustainability* (pp. 415-431). Elsevier.
- Yang, J., Yang, R., Chen, M. H., Su, C. H. J., Zhi, Y., & Xi, J. (2021). Effects of rural revitalization on rural tourism. *Journal of Hospitality and Tourism Management*, 47, 35-45.
- Yang, Y. (2018). Community Participation for Sustainable Rural Development: Revisiting South Korean rural modernization of the 1970s. *Community Development Journal*, 53(1), 61-77.
- Yin, X., Chen, J., & Li, J. (2022). Rural innovation system: Revitalize the countryside for a sustainable development. *Journal of Rural Studies*, 93, 471-478.