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ECOTOURISM AND COMMUNITY-BASED TOURISM AS PATHWAYS TO SDG 8: EVIDENCE FROM LANGKAWI AND MATANG, MALAYSIA

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Abstract:

Although there have been studies on ecotourism, community-based tourism (CBT) and sustainable tourism development in Malaysia, there are few comparative studies on how different tourism governance models contribute to the specific dimension of Sustainable Development Goal 8 (SDG 8), inclusive economic growth and decent work. This study explores the role of CBT in SDG8 in the Malaysian context through two contrasting case studies, one being a government-backed tourism development approach (Langkawi) and the other a community-led conservation approach (Matang). The study uses a desktop review of secondary data from national reports, official statistics and peer-reviewed literature to examine how various development strategies affect employment generation, entrepreneurship, income diversification and local economic resilience. Results show that both models make a significant impact towards SDG 8 outcomes, but in different ways. Although secondary indicators are available, they indicate that Langkawi create more aggregated tourism-related employment and revenues than Matang. Still, due to its reliance on the external market, it is exposed to macroeconomic shocks. Matang, on the other hand, emphasizes the retention of local values, diversified livelihoods, and integration of conservation, with greater livelihood and

local economic resilience, albeit at a smaller economic scale. The evidence examined at both locations suggests that it contributed to employment opportunities, skills development and micro-entrepreneurship of local communities. The study finds that the positive impact of ecotourism on SDG 8 is most likely to occur if rooted in true community engagement, sustainable management of the resources, and context-specific policy development. The key recommendations include the need to speed up digital transformation, build support system for small-scale enterprises and create adaptive CBT system that takes into account not only economic competitiveness, but also long-term ecological and social sustainability. The learnings gained from these insights can be used for other ecotourism destinations in Malaysia and the region of Southeast Asia.

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Community-Based Tourism, Ecotourism, Langkawi, Matang, SDG8



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Introduction

The Sustainable Development Goals (SDGs) represent a global commitment agreed upon at the United Nations (UN) summit in 2015, aiming to achieve prosperity for all by 2030. To ensure a better quality of life, this initiative extends beyond human well-being to encompass environmental protection (the Biosphere), which serves as a vital prerequisite for the SDGs (Jaini et al., 2019). However, a decade into their implementation, global progress is lagging; it is reported that only 35% of the 169 targets are currently on track, while nearly half are progressing too slowly. More worryingly, the remaining 18% of targets appear to be deteriorating compared to 2015 levels (UN DESA, 2025). Malaysia, as an active supporter of the SDGs, is performing relatively well in its stride toward the 2030 goals. Malaysia's SDG progress framework projects that approximately 43% of its national targets are on track and 30% are off-track, marking a performance higher than the global average. However, approximately 22% of the targets are rated as 'not available' because of data constraints, which is more a monitoring problem than a poor performance. The remaining 5% of targets are considered not applicable since they are not relevant to the Malaysian context (MoE, 2025).

SDG 8 is one of the 17 SDGs that is crucial and serves as a connecting thread between the economic, social and environmental goals. SDG 8 is related to the goal of 'Decent Work and Economic Growth', which is 'Sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all'. At the global level, progress on SDG 8 is concerning and slow, with some 18% of targets on track, 15% making moderate progress, 17% making marginal progress, 15% being stagnant and 35% regressing, which is indicative of the widespread challenges in employment recovery, productivity growth and job quality (UN

DESA, 2025). Malaysia's SDG 8 performance, on the other hand, shows relatively better improvements. As illustrated in **Figure 1**, about half (50%) of its assessed targets are on track, 33% are off-track, 8% are not available, and 8% are not applicable (MoE, 2025).

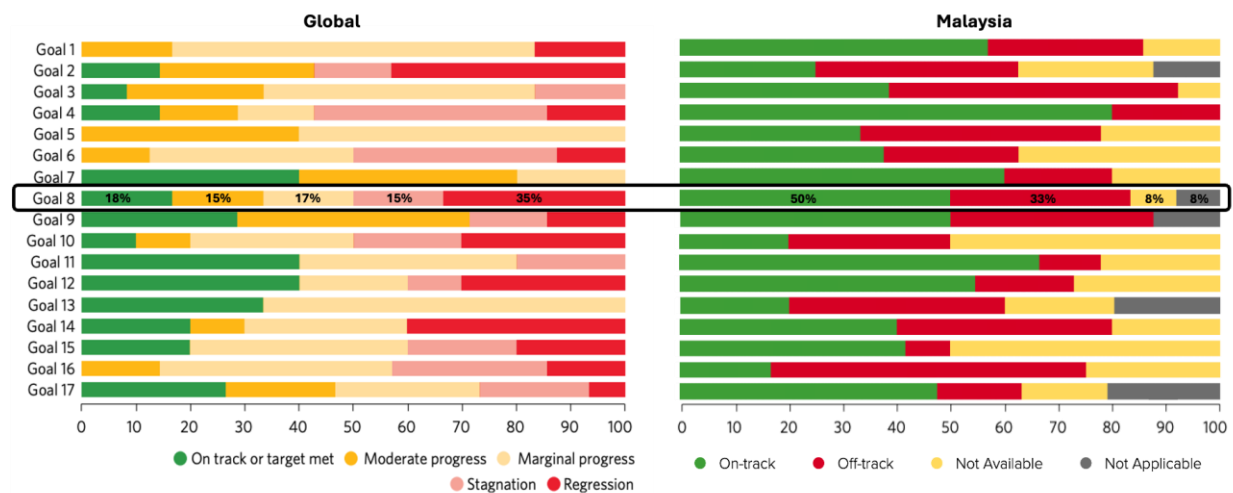


Figure 1: Recent Progress Toward SDG Achievement By 2025, Showing The Percentage Of Assessed Targets For The 17 Goals. The Left Panel Represents The Global Progress Assessment, And The Right Panel Represents The Overall Achievement In Malaysia.

Source: UN DESA, 2025 & MoE, 2025

Malaysia has successfully stabilized the unemployment rate in 2025, standing at between 3.0% and 3.3% and the economy is expected to grow at a steady rate of 4.0% to 4.8% (BNM, 2025). Yet, there are still significant issues that need to be addressed for SDG 8 to be fully realized. The main challenges are increasing the annual gross domestic product (GDP) per capita growth rate, decreasing the share of women in the informal sector and mitigating the growing number of young people in the category of neither in education, employment, nor training (NEET). This is uneven progress, pointing towards a structural imbalance in Malaysia's SDG 8 achievements, especially in rural areas where access to quality and formal employment is still limited (MoE, 2025).

SDG 8, Target 8.9 (Promote Beneficial and Sustainable Tourism) provides a strategic direction to overcome these challenges, while encouraging sustainable tourism that can generate employment and boost local culture and products. Tourism is an activity that requires a lot of manpower and has high short- and long-term economic multiplier effects, especially for rural economic development (Tang & Tan, 2015). The contribution of the tourism sector to the national economy in 2024 amounted to RM291.9 billion or 15.1% of the country's GDP, which is significantly grow higher than the value recorded in 2010 at RM89.3 billion or 12.8% of the country's GDP, as shown in **Figure 2**. The sector also saw a significant increase in employment, with over 3.5 million people working in the sector in 2025 compared to 2.1 million in 2010, and is now a major economic contributor (DOSM, 2025).

At the same time, as shown in **Figure 3**, the largest proportions of the Gross Value Added of Tourism Industries (GVATI) are from retail trade, food and beverage services, and accommodation (around 75%). Ecotourism-related activities under culture, sports and recreation, on the other hand, account for a lesser proportion of about 4% (DOSM, 2025). However, studies show that this subsector has some of the highest economic multipliers,

especially on the local level (Nor et al., 2021). Ecotourism in Malaysia is closely connected with community-based tourism (CBT), particularly in rural and coastal areas where natural ecosystems are the backbone of the tourism products (Ab Rashid et al., 2021). As a result, ecotourism and CBT have become alternative development strategies which make a conscious effort to integrate tourism into the local economy. By emphasizing community ownership, active participation, and local control over tourism businesses, CBT enhances value retention, improves employment quality, and fosters entrepreneurial opportunities for local communities (Nor et al., 2021).

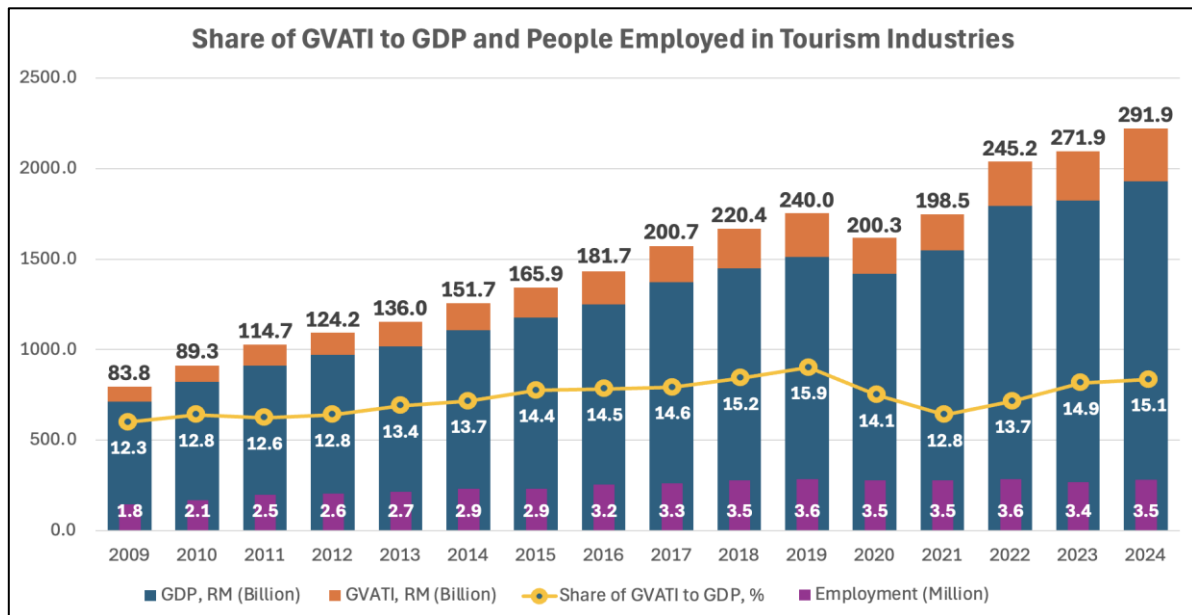


Figure 2: The Gross Value Added of Tourism Industries (GVATI) And Its Percentage Share to Gross Domestic Product (GDP) With the Total of Employed Persons in the Tourism Industry of Malaysia from 2009 To 2024.

Source: DOSM, 2025

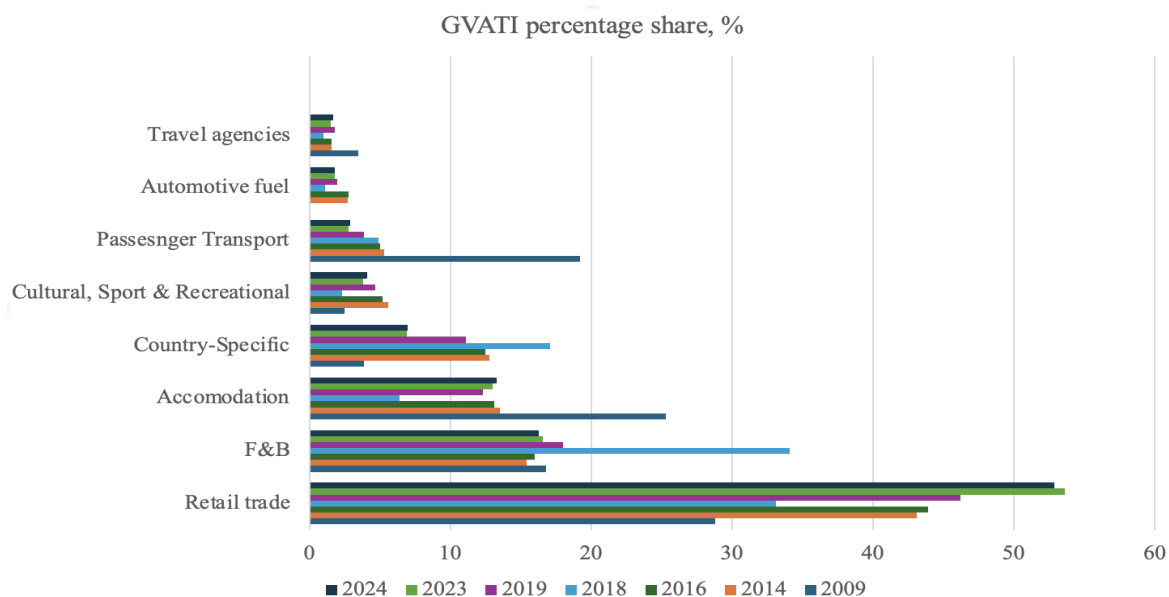


Figure 3: The Gross Value Added of Tourism Industries (GVATI) Percentage Share By Tourism Industries From 2009 To 2024.

Source: DOSM, 2025

The two ecotourism destinations highlighted in this article are the district of Langkawi, Kedah and Matang, Perak, which represent different ecotourism development trajectories. CBT in Langkawi can be seen as an economy of tourism that is influenced by the high level of federal and state developmental assistance, with large-scale investments in infrastructure and destination branding bringing significant aggregate growth for CBT. Matang, on the other hand, is an organically grown, community-managed system where CBT is very much a part of the system, resulting in greater economic benefits being retained at the local level. These cases offer an interesting comparative perspective to explore the potential of ecotourism to generate decent work, entrepreneurship and local economic development under different institutional settings.

Therefore, the main purpose in this article is to explore the role and contribution of ecotourism, in particular CBT, in creating decent work and economic development opportunities in Langkawi, Kedah and Matang, Perak. In order to achieve this, two objectives are set: First, to look at evidence of community involvement in CBT that helps to achieve decent work outcomes; and second, to identify the entrepreneurship and innovation that is fostered through CBT, creating local economic opportunities and supporting sustainable economic growth.

Methodology

The data for this article has been gathered from authoritative international, national and academic sources and is based on a desktop review. The main sources of information are the *Sustainable Development Goals Report 2025* released by the United Nations Department of Economic and Social Affairs (UN DESA), the *Malaysia Voluntary National Review (VNR) 2025* from the Ministry of Economy (MoE), the official statistics from the Department of Statistics Malaysia (DOSM), and the *Key Performance Indicators Report* from the Ministry of Tourism, Arts and Culture Malaysia (MOTAC). In addition to these basic sources, reports of different agencies and peer-reviewed scholarly articles were used to support the discussions regarding ecotourism, CBT, entrepreneurship and innovation. Specific keywords in accordance with CBT dynamics in Langkawi and Matang were selected, and a literature search was carried out. The analysis is, however, limited by the availability and consistency of data at the local level, and only uses secondary sources that are publicly available.

This study investigates community involvement in CBT by looking at the critical aspects of employment and unemployment trends, revenue generation, resource conservation activities and localized tourism programmes to address the first objective. For the second objective, the analysis covers entrepreneurship and innovation, specifically focusing on community-owned businesses, and the products and services developed by the communities themselves for economic growth through CBT (Jackson, 2025).

Area of Interest

Langkawi, Kedah

In northern Malaysia, the Langkawi district is an archipelago of beautiful, unique and biodiversity-rich islands (**Figure 4**) that is famous as a top tourist destination. The island was first settled by farmers and fishermen, and was made a duty-free zone in 1987, which led to a significant shift in its economy towards tourism. The world's fame of Langkawi was further enhanced with its recognition as a UNESCO Global Geopark in 2007. Today, its economy is

still fuelled by institutional support from various entities, most notably the Langkawi Development Authority (LADA), while maintaining compliance with international monitoring bodies. As such, Langkawi exemplifies a government-assisted tourism economy where ecotourism and related sectors are integral to local economic growth and employment (Ali et al., 2025).

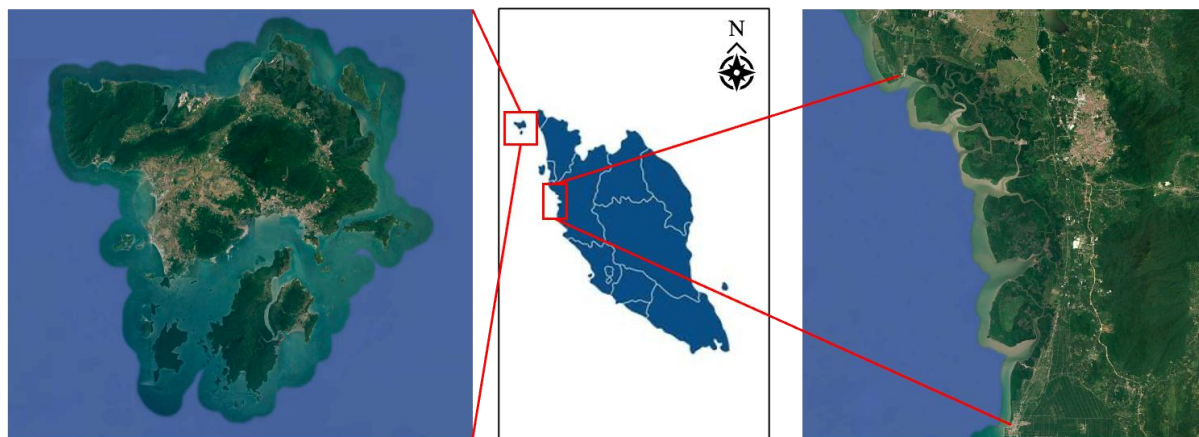


Figure 4: The location of Langkawi and Matang in Peninsular Malaysia (Middle). On the left is Pulau Langkawi, located in Kedah, a northern state of Malaysia, while on the right is the Matang Mangrove Forest Reserve (MMFR) located at the Larut-Matang district in the state of Perak.

Source: Google, 2025

Matang, Perak

In contrast, the Matang district is famous for the Matang Mangrove Forest Reserve (MMFR), which has been internationally recognized as a model for the world's best mangrove forest management since 1902. The MMFR operates under a unique economic model where a traditional charcoal production industry runs in parallel with a growing ecotourism sector (Azam & Unjah, 2017). Spanning approximately 40,711 hectares from Kuala Gula in the north to Bagan Panchor in the south of Perak, the MMFR is the largest mangrove forest in Peninsular Malaysia. It is managed through strategic spatial zoning consisting of 74% productive forest (silviculture and logging), 24% protection forest (ecotourism and conservation), and 1% virgin forest. This ecosystem is a significant socio-economic hub, contributing to the livelihoods of local communities, which include around 12,500 jobs, mostly in the agriculture, forestry and fisheries sectors (GEC, 2023; Razak et al., 2018). The region is in the process of an important economic transformation from traditional fisheries to a more complex, high-value ecotourism model.

Number of Visitors

The ecotourism economy of Langkawi and Matang can be described as a marine-resource-based ecotourism economy, where the marine and coastal resources, such as mangroves, fisheries and rich coastal biodiversity, serve as natural capital, which is essential for the development of ecotourism and marine-based products and food industries. Despite the many differences in size and organizational forms of the two destinations, both offer examples of how ecotourism can generate demand for marine products, encourage local entrepreneurship,

and link traditional fisheries to tourism value chains. In doing so, they help to foster more inclusive economic growth, in line with SDG 8 specifically Target 8.9.

The difference between these two places can be seen in the comparison of the number of visitors at two representative ecotourism sites, namely Sungai Kilim in Langkawi and Matang Eco Education Center (MEEC) in Matang, as shown in Table 1. Sungai Kilim is visited by about 10% of all tourists to Langkawi. This stands in stark contrast to the annual visitation at the MEEC, which is only about 10% of the total visitation of Sungai Kilim, an apparent difference and an indication of the scale of tourism and the pressure it exerts in the two areas.

Table 1: The number of visitors (in thousands) visited Langkawi (LADA, 2026), Sungai Kilim (Ismail et al., 2021) and Matang Eco Education Center (Razak, 2018) from 2012 to 2024.

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Langkawi	3,060	3,410	3,410	3,620	3,630	3,680	3,630	3,920	1,800	1,090	2,580	2,810	2,900
Kilim	292	315	292	277	232	-	-	-	-	-	-	-	-
Matang	10.9	26.1	46.9	46.3	46.6	-	-	-	-	-	-	-	-

Source: LADA, 2026; Ismail et al., 2021 & Razak, 2018

Results

Community participation in CBT

Tourism Programs

The tourism programs in both locations are oriented towards the ecological strengths of each area, but the extent and type of diversity vary greatly. Langkawi has a large number of visitors, which helps it to have a variety of CBT activities. Some of the most popular are mangrove tours and the exploration of Geoforest, which is the reason why Langkawi is a UNESCO Global Geopark. Agro tourism is also present, in which one of the orchid farms provides educational and recreational opportunities. Gastronomic tourism is another important part, and many villages have a speciality of local cuisine, such as *Bronok*, a unique local delicacy of Langkawi (Figure 5a). Besides, there are also various activities that can be carried out in the waters, such as kayaking, snorkeling and diving that will further enrich the tourism offerings and provide direct jobs for local operators (Marzuki & Khoo, 2016).

Matang, on the other hand, has a more limited, but very unique nature-based tourism package, promoting ecological experience and cultural heritage. Popular activities include mangrove river tours and bird watching in the Kuala Gula area, which is a renowned habitat for migratory waterbirds (Rahman et al., 2025). Visitors can also take part in charcoal kiln tours (Figure 5b), where they observe traditional charcoal production processes that are systematically linked to the area's century-old sustainable mangrove management framework. A highlight of Matang's ecotourism is the firefly night tour, where visitors cruise slowly along the river corridors

flanked by Berembang¹ (*Sonneratia caseolaris*) mangrove forests to witness firefly colonies, an attraction that directly links conservation with tourism income (Sulaiman & Abdullah, 2017).



Figure 5: Tourism Programs Examples Such As (A) The Unique Traditional Delicacy Of Langkawi Called *Bronok*, Which Is Usually Served Mixed with Herb Salad And (B) The Kiln In Matang For High-Quality Traditional Charcoal Productions.

Revenue

In Langkawi, community participation in CBT is predominantly institutionalized through cooperative-based arrangements operating within a broader, state-led tourism development framework. The Koperasi Komuniti Kampung Kilim Berhad (COOPKILIM) has shown that community-managed ecotourism can provide good and fairly sustainable income. The total tourism-related revenue received by COOPKILIM in 2021 was about RM697,000, with 83.6% coming directly from the boat-based ecotourism services, indicating the economic viability of marine-based CBT activities (SKM, 2025). This economic performance is supported by strong demand from visitors, as in 2016, Kilim Geoforest Park had 212,552 visitors with an average of 638 visitors per day, and the number of visitors increased in subsequent years (Ismail et al., 2021; Ab Rahman & Hasim, 2023). These continued numbers of tourists create direct jobs for community members as boat operators, nature guides and service providers, and indirect jobs in the tourism sector in hospitality and food and beverage sectors, and tourism administration, which all help achieve decent work outcomes.

Conversely, the information on the amount of tourism revenue for the Matang district was not available. Official documents mainly provide general information on forestry and fisheries production, which is not relevant to the particular focus of this study on ecotourism. As a result, this data constraint represents a baseline monitoring challenge for evaluating Matang's localized economic trends.

¹ *Berembang* (*Sonneratia caseolaris*) - is a species of mangrove tree native to the coastal mangrove swamps and tidal riverbanks of tropical Asia.

Resources Conservation

Conservation of resources is an important component of CBT activities in both Langkawi and Matang, where many multi-stakeholder activities are taking place with the active participation of the local community, government and private sector. Conservation efforts in Langkawi are very evident and clearly incorporated in the tourism value chain. Replanting program of mangroves is systematically conducted through collaboration between Langkawi Development Authority (LADA), state agencies, corporate social responsibility (CSR) programs and local tourism operators, especially in Kilim and Kubang Badak biomes (Ab Rashid et al., 2021). Likewise, the coral rehabilitation projects (Tajam & Mokhtar, 2019) are co-implemented by the Department of Fisheries Malaysia (DOF), LADA, corporate donors and local marine tourism operators. Moreover, the artificial reefs (Figure 6a) are installed with a structured alignment of the habitat restoration and development of sustainable ecotourism by LADA, DOF, MOTAC and the Kubang Badak community.

Conservation work in Matang is structurally integrated in the long-established statutory ecosystem management frameworks. Sahabat Hutan Bakau Kuala Gula (SHBKG), along with the State Forestry Department, corporate partners and local nature guides (Figure 6b; Azam & Unjah, 2017) are responsible for the community-led mangrove replanting activities in Kuala Gula. In parallel to these civic works, the Forestry Department has a world-renowned silvicultural harvest rotation of 30 years to ensure long-term sustainability of the timber and the ecosystem. Wildlife protection is also a significant focus; the Department of Wildlife and National Parks (PERHILITAN) operates the Kuala Gula Bird Sanctuary to preserve the migratory routes of birds, and local communities, especially in Kampung Dew, are the main agents in conserving Berembang riverine corridors to ensure the survival of firefly populations that support the local night river cruise economy (Sulaiman & Abdullah, 2017).

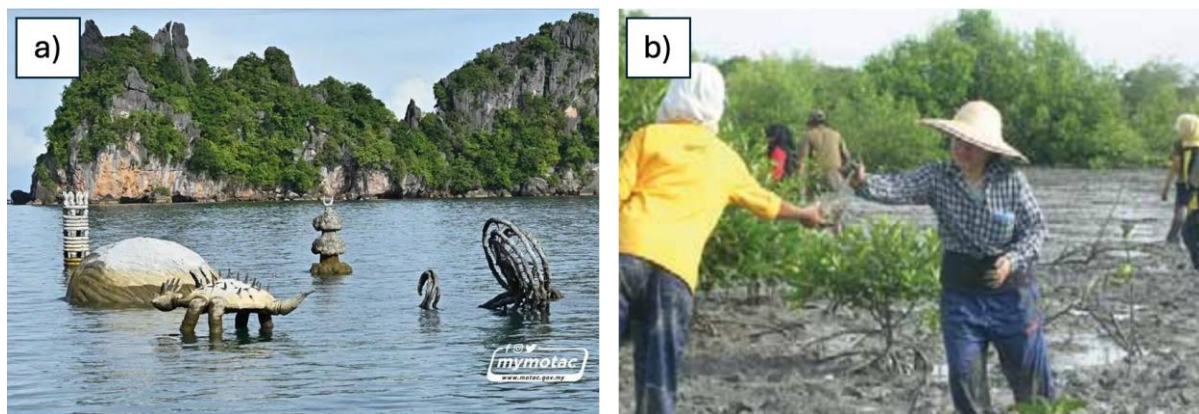


Figure 6: Resource Conservation Example: (A) Artificial Sculpture Reef Deployment And (B) Mangrove Planting Program Organized In Collaboration By Government Agencies, Community, Ngos, And Corporate Sectors.

Source: MOTAC; GEC, 2023

Employment and Unemployment

While employment information is still limited at the district level, the national census 2020 (DOSM), as presented in Table 2, shows that the employment to population ratio for Langkawi and Matang were 69.0% and 65.6%, respectively. Unemployment rates have spiked in both

study areas since the baseline trends set in 2019 (DOSM, 2022 & 2025) and with the beginning of the COVID-19 pandemic. The highest unemployment rate in 2021 was recorded in Langkawi at 7.3% compared to Matang at 6.2%, which indicates that the mass tourism economy in Langkawi is very susceptible to external shocks from the global economy. The labour market showed a significant recovery, as macro-economic conditions slowly improved and local economic activities slowly got better. The unemployment rate in Matang was reduced significantly to 2.8% as compared to Langkawi's unemployment rate of 4.9% in 2024. The divergent recovery trajectory indicates that Matang is economically more resilient, which may be due to the community-based economic diversification that buffers its labour performance closely with the national unemployment baseline of 3.0% to 3.3% (BNM, 2025).

Table 2: The Unemployment Rate (Percentage, %) In Langkawi And Matang District For The Recent Years Of 2019 To 2024.

Year	2019	2020	2021	2022	2023	2024
Langkawi	3.7	6.9	7.3	5.8	5.7	4.9
Matang	3.8	5.4	6.2	5.8	3.1	2.8

Source: DOSM, 2022; DOSM, 2025

Entrepreneurship and Innovations Through CBT

Community Owned Business

Community-owned businesses are a major component in enhancing CBT in both Langkawi and Matang, but in different ways. Community cooperatives in Langkawi are an effective model in managing businesses collectively. Through cooperatives like *Koperasi Komuniti Kampung Kilim Berhad* (COOPKILIM), *Koperasi Kubang Badak*, and *Koperasi Komuniti Kepulauan Tuba dan Selat Berhad* (KOPTUBAS), the community members can benefit from shared business development, partnership and income generation. Activities such as events and tourism in these cooperatives also provide opportunities for individually owned micro and small enterprises to be part of the tourism value chain. The food sector is one of the most noticeable spillover sectors, as Langkawi has a wealth of marine resources which are used in the production of seafood-based products and fish crackers, which are popular local brands like Lekoshow (**Figure 7a**). Moreover, a considerable number of small operators are engaged in marine-related activities like private boat tours and other tourism support services.

CBT-related enterprises in Matang are mostly privately owned and are mostly smaller in size, like the Kuala Sepetang Eco Tourism private river cruise (**Figure 7b**). There are some businesses which are supported or coordinated by community-based organizations and NGOs like Sahabat Hutan Bakau Kuala Gula (SHBKG). Ecotourism activities are directly related to the local communities, including in Kampung Dew, through activities such as mangrove tours, conservation activities, and village-based ecotourism. In addition to nature-based services, CBT has also boosted marine-based product industries, such as dried fish and *belacan*² production, that have benefited from the growing demand of visitors and have also added to the local entrepreneurship.

² *Belacan* - is a pungent, savory, and umami-rich Malaysian fermented shrimp paste made from tiny, crushed krill and salt.



Figure 7: Community-owned business as an example of entrepreneurship: (a) Lekoshow of Pulau Tuba, Langkawi and (b) the Kuala Sepetang Eco Tourism by Nature Tour guide.

Source: Lekoshow Langkawi (2023) and Kuala Sepetang Eco Tourism (2024)

Products Innovation

Another significant result of CBT is in the field of product development, where both Langkawi and Matang are examples of how local natural resources are turned into value-added products. One of the most popular products in Langkawi is *gamat* (sea cucumber), which has been used traditionally and now made into a variety of innovative products such as massage oils, wound healing balms, lotions and health supplements for internal and external use (Hasan et al., 2017). Many local brands have sprung up, one of which is *Nusantara* (Figure 8a), which is well known by visitors. The island is also renowned for its fish cracker industry, and brands like *Lekoshow* (Figure 8b) are becoming popular. Furthermore, the communities in Kubang Badak have established businesses related to crab farming and also *laktud* (seaweed), which includes the production of various diversified products like herbal teas, soaps and lotions (Abdullah, 2021; Ahmad et al., 2022). These examples illustrate an approach that CBT promotes to expand marine-based resources to higher-value-added products.

Product development is closely associated with the mangrove ecosystem in Matang and is frequently supported by NGOs and corporate partners. The use of local ecological knowledge in small-scale production has also been seen in the introduction of unique products based on mangroves, like Berembang fruit juice and Jeruju tea (Figure 8c), by the communities in Kuala Gula. Marine-related handicrafts, such as shells (Figure 8d), are also sources of income for the community (Husin et al., 2010; GEC, 2023). As for local food, the local cuisine, *Mee Udang* (prawn noodles), is a food attraction in the Matang area, which has been enhanced by the restaurant Mak Jah Mee Udang (Figure 8e), drawing visitors and reinforcing the link between tourism and local food entrepreneurship.



Figure 8: Product Innovations Based On Natural Resources, Marine-Based For (A) Gamat Diverse Products, (B) The Lekoshow Fish Crackers, Drinks And Sauces, (C) The Mak Jah Special Prawn Noodle At Kuala Sepetang, (D) Jeruju Tea And (E) Handicrafts Made By The Community Of Kuala Gula.

Services Innovation

As CBT has grown and seen the demand for services related to tourism, with conservation initiatives, localized tourism programs and product innovation all creating a demand for services in the tourism sector, this has resulted in significant service innovation within CBT. The development of ecotourism has greatly diversified the provision of services by local communities in Langkawi. The oldest services are mangrove excursions and private boat tours, most of these being conducted by community members on their own or under some form of institutionalization, such as a local cooperative. With the rise in demand for tourism, more private operators and small agencies have come into the market, which has boosted local participation in service provision, but has kept the price competitiveness of the services.

Service diversification also includes the growth of water-based activities like kayaking, jet-ski tours, snorkeling and self-drive boating that are essential alternative income streams to the traditional nature guiding. There has been scaling up of supporting services too, such as renting of motorcycles, cars and watercraft as well as community-operated homestay facilities with amenities and more. The growth of homestay businesses represents the first-hand involvement of local households in the tourism value chain, which can help them to retain the tourist expenditure that may be spent in large commercial establishments.

In contrast, the scope of tourism services in Matang is smaller, but tourism products are unique and closely related to the natural environment. The district is especially known for mangrove river cruises and nature guided tours which emphasize environmental interpretation and conservation awareness. Recreational fishing trips are also an essential service, which enables guests to experience traditional fishing or to get on one of the floating chalets offshore. These services are designed to be strategically based on the local knowledge and physical resources, allowing the community members to diversify their livelihoods without demanding large capital investment. In this regard, Matang's service sector is less horizontally diversified than

Langkawi's, but exhibits a more cohesive and robust interconnection between localized tourism, traditional livelihoods and ecosystem conservation.

Discussion

Community Participation in CBT

The results show that the involvement of the community is one of the key aspects of CBT in both Langkawi and Matang, but in different forms, depending on the economic and institutional context. The community involvement in Langkawi is in a federally state-assisted and tourism-intensive setting. This opens up the door to greater numbers of visitors and greater market demand. Still, it also creates a greater vulnerability to external shocks, as happened during the COVID-19 pandemic, when the number of visitors dropped significantly due to travel restrictions (Mat Yusof et al., 2025). The reliance on external access to transportation also further exposes Langkawi to global and national disruptions.

Matang, on the other hand, has a more community-oriented and resilient economic system. Tourism is part of the existing livelihood system, which contains fishing, aquaculture and small-scale processing. Here, the involvement of CBT in local resource management practices is more organic. Ecotourism-related jobs like nature guiding, boat services, small retail and food processing (e.g., belacan, dried fish and shrimp) are complementary, not replacement, income sources (Husin et al., 2010; GEC, 2023). Community-based organizations (CBOs) like Sahabat Hutan Bakau Kuala Gula (SHBKG) are important in coordinating the conservation and tourism activities, including mangrove planting and ecosystem management. This diversification helps to ensure the resilience of livelihoods, particularly in the context of climate variability and environmental uncertainties.

As a whole, CBT helps to create decent work as defined by SDG 8, through the creation of jobs, multiple income streams and local capacity building. Still, results depend on institutional settings. With state support and a higher number of visitors, higher income can be achieved in Langkawi, but with a higher degree of dependency on the market. CBT is more of a livelihood resilience approach in Matang, where it is more about local ownership, collective action and sustainability (Mat Yusof et al., 2025). The results indicate that CBT fosters decent jobs by creating jobs as well as by improving community control, inclusion and economic stability.

Entrepreneurship and Innovation in CBT

The study also reveals that CBT is a catalyst for entrepreneurship and innovation with a different approach to development in both destinations. The strong demand of the tourism industry, infrastructure and government support are the main motivators of entrepreneurship in Langkawi. Ecotourism has led to the development of marine-based and value-added products, particularly the gamat (sea cucumber) industry, which has grown from the traditional harvest to branded health, cosmetic and medicinal products. Other businesses are the production of seaweed products, fish-based food and crab farming, which shows diversification to higher value-added activities related to the tourism market (Ab Rahman & Hasim, 2023).

In addition to the integrated business models, there are also community cooperatives, like COOPKILIM, Koperasi Nelayan Kubang Badak, and KOPTUBAS, which involve the combination of tourism service (boat tour, kayaking, rentals), aquaculture and food production.

These vertical linkages depict the potential of CBT to link Tourism, Fisheries and Small-scale manufacturing (Abdullah, 2021; Ahmad et al., 2022). The rise of homestays and small accommodation businesses also shows the direct tourism benefits that households are able to gain and diversify outside of their primary livelihoods (Mat Yusof et al., 2025). This growth, however, comes with challenges as well. Although incomes may improve, communities can also become vulnerable to fluctuations in incomes during times of economic downturn due to an increase in the cost of living and a reliance on tourism markets (Ibrahim et al., 2019). Therefore, the entrepreneurial ecosystem in Langkawi is dynamic and more vulnerable to the wider economic fluctuations.

Entrepreneurship and the conservation of the ecosystem and local ecological knowledge are integral in Matang. The community groups and the non-governmental organizations (NGOs) actively contribute to the development of value-added products such as Berembang juice and Jeruju tea based on mangroves as well as artisanal handicrafts using natural materials from the community (GEC, 2023; Husin et al., 2010). The initiatives are examples of a model of innovation that is linked with environmental protection and income generation and is built around the local place. Entrepreneurial activities in Matang are usually small in size and are family-run, supported by cooperative co-management between the local communities, civic groups and state service providers (Azam & Unjah, 2017). Conservation-based jobs like systematic mangrove restoration and firefly habitat protection not only support the conservation of the underlying ecosystem but also enhance the ecotourism experience and create job opportunities that require specialized and skilled persons to guide nature lovers. Moreover, local innovation, as exemplified by soft-shell crab aquaculture's integration into experiential educational tourism products, demonstrates how local innovation can successfully expand into knowledge-based service niches (Adlan & Yusof, 2024).

Overall, the results indicate that CBT fosters entrepreneurship not only by creating more businesses but by creating an entrepreneurship ecosystem from the local context. The two destinations, Langkawi and Matang, are exemplars of a market-driven, higher-revenue model and a conservation-linked, resilience-oriented model with high local value retention, respectively, both of which are supported by infrastructure and policy. They both help to achieve SDG 8 by promoting innovation, livelihood opportunities and community engagement in tourism value chains, which are all essential for a blue–green economy that relies on marine and forest ecosystems for sustainable economic growth.

Conclusion and Recommendation

The development of ecotourism in Langkawi and Matang has emphasized the paradox of ‘conservation and exploitation’, as the environmental sustainability and social well-being are dependent on the commercialization of these resources. However, if the capacity limit is not considered, then the balance may be jeopardized (Ismail et al., 2021). The mangrove forests at Matang are still maintained as the charcoal industry there follows the silvicultural cycle, and the sensitive habitats in Matang and Langkawi are safeguarded by the tourism fund (Razak et al., 2018; GEC, 2023). Still, if the exploitation is beyond the ecosystem's carrying capacity to maximize short-term profits, it will affect the natural assets, which are hard to restore (Azam & Unjah, 2017). Thus, the stability of employment and the economy of the community can only be maintained if this exploitation is well managed, well-disciplined and does not over-exploit nature's ability to produce.

The findings of this article are that CBT contributes to SDG 8 by enabling decent work and entrepreneurship in a context-specific manner. CBT in Langkawi is supported by the government, infrastructure and high demand from tourists, which creates more employment and business opportunities but with higher reliance on the external market. Matang, on the other hand, has a CBT approach that focuses on value retention, conservation and resilience, leading to smaller scale, but more locally controlled and sustainable economic returns. CBT not only generates employment opportunities but also enhances job quality, supports innovation and enhances community engagement in tourism value chains, contributing to SDG 8 specifically Target 8.9.

Based on the studies reviewed, the article suggests two recommendations to make CBT a more competitive economic force and to fit it into the current operational structures. CBT needs to be more competitive and accessible, and digital transformation is the first step in doing so, with online integrated platforms and targeted digital marketing. Policy support should therefore be directed towards enhancing the digital coordination mechanisms in place at the community level, such as cooperative managed inventories, standardized pricing systems, and shared digital skills, to enable local operators to interact with global platforms on a more equitable basis without it resulting in greater economic leakage or loss of community control. These tools can enhance the experience for visitors by minimizing uncertainty and inefficiencies in operation, and increasing market access, which is especially relevant for rural and CBT destinations.

Finally, more focus needs to be given to the development of small-scale, locally owned businesses in which tourism-related products and services are able to bring in inclusive benefits for both the visitors as well as the local population. Policy support in Langkawi should focus on increasing local involvement in the tourism value chain, such as local suppliers, cooperative enterprises and diversified local products, to minimize the need for involvement of intermediaries. In Matang, where CBT is linked to conservation and a number of livelihood activities, targeted small grants, community-based financing and support for conservation-related enterprises can help to increase income stability whilst ensuring environmental sustainability. This not only increases the capacity of communities to be self-reliant but also provides multiple streams of income and decreases their susceptibility to external demand shocks, which helps to increase economic resilience in the long term.

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