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PLANNING AND MANAGEMENT BARRIERS IN MARINE PARK ISLAND GOVERNANCE: INSIGHTS FROM EAST COAST PENINSULAR MALAYSIA

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Abstract

Local authorities in many countries serve local communities by facilitating and maintaining public amenities. Apart from that, local authorities also manage the planning and development of local tourism. A tremendous number of responsibilities and work are burdening local authorities to manage the planning and development of tourism islands. This research aim is to identify management barriers faced by local authorities managing the Peninsular Malaysia Marine Park Islands. The results were obtained from in-depth interviews with the four local authority officers and document analysis. The local authorities are Majlis Bandaraya Kuala Terengganu (MBKT) for Redang Island, Majlis Daerah Marang (MDM) for Kapas Island, Majlis Daerah Besut (MDB) for Perhentian Island and Tioman Development Authority (TDA) for Tioman Island. Two officers from each local authority were interviewed. The officers are from the Department of Town Planning and the Department of Municipal Services and Licensing. Altogether, nine officers were interviewed. Several barriers have emerged from the analysis. The results indicated that six barriers are common, and three barriers are specific to the departments. The common barriers are a lack of funding, a lack of staff, time constraints, substantial distance from the mainland and a lack of commitment from top management and a lack of intergovernmental coordination/collaboration. This research can be extended to marine parks located in Sabah and Sarawak, and a comparative study can be accomplished for further improvements in the planning and management of the MPIs.

Keywords: Management Barriers, Marine Park Islands, Town and Country Planning, Municipal Services and licensing

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INTRODUCTION

Malaysia is a rich country with marine biodiversity assets such as colourful coral reefs and marine fish. In Peninsular Malaysia, 42 Marine Park Islands (MPIs) are gazetted and managed by the Marine Park Department under the Ministry of Natural Resources and Environment. East Coast Peninsular Malaysia's MPIs are managed in a three-tiered system. Top management is the Federal Government, followed by the State Government and then the Local Government. The Federal Government's task is to formulate policies related to Marine Parks. Two relevant Acts are the Environmental Quality Act 1974 and the Fisheries Act 1985.

The second government level is the State Government. The State Government has the authority to make decisions for the development, planning and promotion of the MPIs. State Governments formulate Structure Plans as a reference for local authorities to formulate District Local Plans. State Structure Plans lay strategies and programs for the development of MPIs for each state. State Governments prepare regional and structure plans in accordance with the National Physical Plan (2005) under the Town and Country Planning Act (1976). The third level of government is the local authority. The Ministry of Housing and Local Government is a federal agency that plays a major role in coordinating and managing funds of local authorities across Peninsular Malaysia. The secondary purpose of local authorities is to look after the planning and management of MPIs.

In conclusion, Federal, State and Local authorities are responsible for developing, managing and promoting MPIs in Peninsular Malaysia. The Federal Government is in charge of MPI's marine affairs. The State Government is in charge of MPI's land affairs. Meanwhile, local authorities are in charge of MPIs' land development, management and maintenance of the public amenities. Among the three government levels, local authorities play significant roles in the success of the tourism industry at the MPIs (Abdul Khalid et al., 2013).

A tremendous amount of responsibilities and work burden local authorities to manage the planning and development of tourism islands (Safuan et al., 2022). Several studies have discussed the barriers local authorities face in many countries. However, studies regarding barriers faced by Peninsular Malaysia's local authorities in managing East Coast Peninsular Malaysia MPIs are limited.

The objective of this paper is to identify barriers faced by local authorities in managing East Coast Peninsular Malaysia MPIs. The outcomes of this paper will help local authorities manage the MPIs properly.

LITERATURE REVIEW

Local authorities in many countries serve local communities by facilitating and maintaining public amenities. Apart from that, local authorities also manage the planning and development of local tourism. Several studies have discussed the

barriers local authorities face in many countries (Table 1). However, studies regarding barriers faced by local authorities in managing East Coast Peninsular Malaysia MPIs are not available.

Table 18: Studies on the Barriers Faced by Local Authorities in Managing Marine Tourism Areas

Authors	Country involved	Barriers faced by local authorities in managing marine tourism areas
Connor, et al (2010)	Ireland	• Negative political Influences-Lack of commitment of top officials. • Insufficient technical expertise –Frequent personnel transfer. • Limited financial resources.
Dredge, et al (2011)	Australia	• Too many local government bodies. • Lack of financial resources. • Frequent movement of staffs among departments. • Tourism industry not priority for local government. • Lack of experts' staffs.
Liu, et al (2011)	Taiwan	• Management authority- Existing laws not sufficient and consistent. • Management capacity and resources- Lack of resources (financial, facilities, manpower). • Officials' commitments - Lack of political commitment. • Lack of intergovernmental coordination and collaboration.
Yates, et al (2013)	Northern Ireland	• Too many policies, legislation, best practices, and guidelines from all levels of governments. • Lack of staff. • Lack of financial capacity. • Lack of communication and cooperation between departments.
Brokaj (2014)	Albania, Vlora	• Limited enforcement. • Weak capacity • Lack of resources • Lack of coordination between departments. • Overlapping of functions and duties between departments. • Lack of reliable information about the tourism industry.
Saad, et al (2014)	Malaysia Perak	• Shortage of skilled workers. • Overlaps in jurisdiction between local government. • Lack of development funds.
Siti Nabiha, et al (2015)	Malaysia	• Lack of stakeholder involvement.

Authors	Country involved	Barriers faced by local authorities in managing marine tourism areas
	Penang Island	• Unclear roles and functions of the LA in tourism planning. • Different points of view between various agencies. • Weak communication between agencies.
Ramirez (2016)	Colombia	• Lack of harmonisation between policies. • Lack of consensus and coordination among organisations. • Lack of financial, technical, control and surveillance capacity • Lack of participatory mechanisms between community and government.
Brooks, et al (2016)	Australia	• Lack of coordinated planning and action of local authorities. • Lack of financial resources. • Lack of political motivation.
Botero, et al (2020)	Colombia	• Lack of knowledge and skills on managing tourism islands • Lack of fund from main government • Negligence from local authorities • Frequent changes of political powers
Safuan, et al (2022)	Malaysia, Terengganu Islands	• Too many laws and overlapped jurisdiction between federal and state government on the marine islands

One of the main obstacles identified is the lack of resources such as funds, expertise and time. The majority of the studies agreed that lack of resources is a common barrier (Abdul Khalid et al., 2013; Brokaj, 2014; Liu et al., 2011; Ramirez, 2016; Yates et al., 2013). Regarding the lack of funds, local authorities receive funds from the State and Federal Governments. The majority of the funds are allocated for core activities rather than tourism activities. For example, local authorities in Peninsular Malaysia are under the purview of the Ministry of Housing and Local Government. The majority of the funds are allocated for the development and maintenance of public facilities located on the mainland.

Local authorities in many countries are facing a lack of administrative staff and expertise (Abdul Khalid et al., 2013; Dredge et al., 2011; Yates et al., 2013). Local authorities usually lack expertise in the area of tourism planning and management. The numbers of staff hired are usually limited due to budget constraints. Moreover, the frequent movement of officers among departments further reduces the expertise (Abdul Khalid et al., 2013; Dredge et al., 2011).

Time constraint is another common barrier faced by many local authorities (Khalid et al., 2013; Borja, 2010). Local authorities have various tasks

to fulfil. Huge amounts of work with few staff can cause time constraints for officers to perform enforcement and monitoring of remote areas, such as islands.

The next barriers are overlapping jurisdiction and lack of collaboration between government agencies in managing and promoting marine tourism (Liu et al., 2011; Safuan et al, 2022). Three-tiered government structures with various tourism units are leading towards overlapping efforts and ineffective use of resources (Brokaj, 2014). Sometimes, the overlapping of roles results in ignorance of problems, where agencies start to point fingers at each other as being responsible.

The lack of collaboration between local authorities is well known. Most local authorities are adopting ‘*go-it-alone*’ policies (Dredge et al., 2011). Sharing of knowledge, information and resources between adjacent local authorities and stakeholders can help to manage tourism areas in more efficient ways and solve problems more systematically. Insufficient consultations between local authorities and stakeholders resulted in a lack of collaboration.

Other barriers identified are inappropriate, outdated, and inconsistent legislation of the marine tourism industry (Liu et al., 2011; Ramirez, 2016). The federal government is responsible for formulating tourism policies to be implemented by local authorities. Usually, tourism policies are formed without the integration of local communities and stakeholders’ opinions and interests. In many countries, policies are created to benefit the government, not stakeholders.

In some countries, such as Australia, the UK, Malaysia, and the Philippines, some marine tourism policies and bylaws were formulated in the 1970s and 1980s. Since then, the Laws and Acts have not been updated. Outdated marine laws are not suitable for solving new emerging issues for the marine tourism industry.

The last barrier identified is the lack of commitment from top management because tourism and sustainable tourism are not a core business of most countries’ local authorities. In Malaysia, sustainable tourism development and planning are still not considered the main agenda among the local authorities. Therefore, there is a lack of enforcement and monitoring at the marine tourism islands.

In conclusion, the discussions above indicate that local authorities of various countries face many barriers in managing marine tourism areas. Therefore, to fulfil the literature gap, this study’s fourth objective is to determine the management barriers faced by Peninsular Malaysia’s local authorities in managing the four MPIs.

RESEARCH METHODOLOGY

This study was conducted in Peninsular Malaysia and focuses on the East Coast Peninsular Malaysia’s MPIs. Four MPIs were chosen for investigation. The

islands are Kapas Island (Terengganu Marine Park), Perhentian Kecil and Besar Island (Terengganu Marine Park), Redang Island (Terengganu Marine Park) and Tioman Island (Pahang Marine Park). These four MPIs are the most populated and developed with tourism accommodation facilities. This study conducts qualitative research. This study employs semi-structured interviews because it lies between structured and unstructured interviews which is considered the most appropriate technique (Sarantakos, 2005). According to Robson (2002), semi-structured interview questions are usually pre-determined, but the order and wording can be omitted or added during the interview session, depending on the situation. All the interviews were conducted by taking notes and with the aid of a tape recorder. All the interviews were conducted in Bahasa Malaysia due to the official language. The interviews were recorded verbatim and analysed using ATLAS.ti. The interview was conducted to identify management barriers faced by the local authorities in managing the MPIs. MPIs in Peninsular Malaysia are managed by the local authority in terms of solid waste management and planning matters. The departments involved are the Department of Municipal and Health Services and the Planning Department. Officers from the related local authorities were interviewed. The lists of the officers interviewed are shown in Table 2.

Table 2: Details of the Local Authorities Officers Interviewed

MPIs	Department	Interviewees	Position
Kapas Island	Town Planning Division	Respondent 1	Asst. Town Planner
Majlis Daerah Marang (MDM)	Urban services and Licensing Division	Respondent 2	Asst. Environmental Health Officer
Perhentian Island (Kecil and Besar Island)	Building Control	Respondent 1	Asst. Engineer
Majlis Daerah Besut (MDB)	Department of Licensing-SWM	Respondent 2	Asst. Environmental Health Officer
Redang Island	Town Planning Division	Respondent 1	Town Planner
Majlis Bandaraya Kuala Terengganu (MBKT)	Department of Licensing- SWM	Respondent 2	Asst. Environmental Health Officer
Tioman Island	Department of Planning and Development	Respondent 1	Manager of Planning and Development Division
Lembaga Pembangunan Tioman (LPT)	Department of Municipality and local government	Respondent 2	Asst. Manager

The study was answered by analysing the interview transcripts using ATLAS. ti coding. Figure 1 indicates step-by-step procedures adopted to answer the study question. The barriers faced by the related local authorities are identified using priori and emergent coding. Priori coding is the code that has been predetermined from the literature (Talib, 2013). The six priori codes

identified from the above literature were lack of resources, overlapping of jurisdiction, lack of collaboration, outdated legislation, lack of commitment from top management and lack of enforcement. Meanwhile, emergent coding is the code that emerged after analysing the transcripts (Talib, 2013). The emergent codes are known as specific barriers, whereas Priori codes are identified as common barriers. These codes will be discussed in the analysis section.

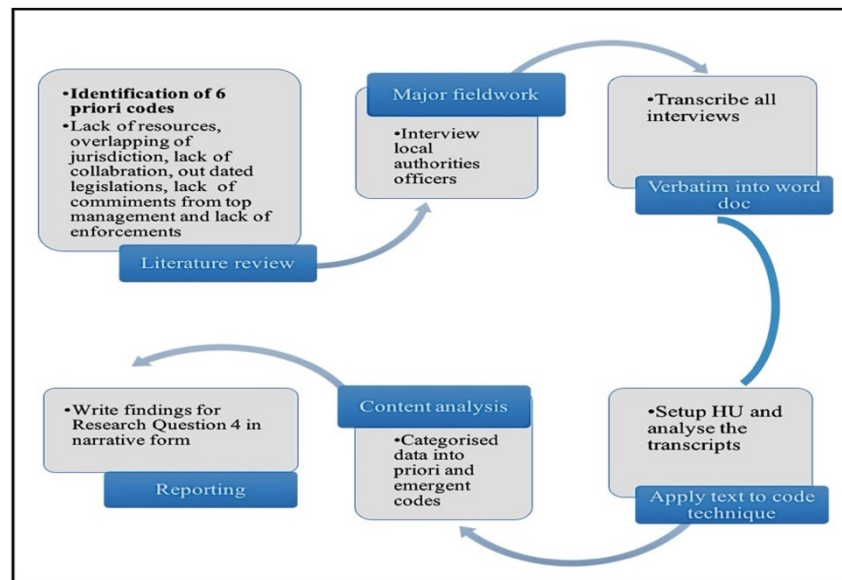


Figure 14: Procedures for data analysis using ATLAS.ti

ANALYSIS AND DISCUSSION

The study findings were obtained from in-depth interviews with the four local authority officers and document analysis. Altogether, nine officers were interviewed. Several barriers have emerged from the analysis. The results indicated that six barriers are common, and three barriers are specific to the departments. Table 3 indicates the common and specific barriers.

Table 3: Summaries of The Management Barriers Faced by the Local Authorities in Managing the Four Islands

No	Departments	Common Barriers	Specific Barriers
1.	Town Planning	1. Lack of funding 2. Lack of staff 3. Time constraint 4. Substantial distance from the mainland 5. Lack of commitments from top management	1. Illegal construction and extension 2. Lack of development plans and programs for islands 3. Lack of involvement and communication with chalets operators
2	Municipal Services and Licensing	6. Lack of intergovernmental coordination/collaboration	1. Careless attitudes of waste contractors 2. Lack of support from operators in reducing waste on the islands 3. Small and unsuitable waste boats

Common Barriers

Both departments of the local authorities are facing several common barriers in managing the four MPIs. The barriers are a lack of funding, a lack of staff, time constraints, substantial distance from the mainland, a lack of commitment from top management, and a lack of intergovernmental coordination and collaboration.

1) Lack of Funding

Lack of funding is the most common barrier identified throughout the literature (Abdul Khalid et al., 2013; Brokaj, 2014; Liu et al., 2011; Ramirez, 2016; Yates et al., 2013). Analysis of the interviews indicates that local authorities have limited funds. Funds are available for local authorities to carry out their core responsibilities. For example, the MDB planning officer said: “The *Council always have a limited budget*”. While the MBKT Licensing officer put it: “*We have a budget, but always limited*”. Moreover, the LPT planning officer informed: “*We do not have enough capital to maintain public amenities on the island*”. All the officers reported that local authorities do not have sufficient funds to develop and maintain public amenities on the islands. The reason is that local authorities receive funds from the State Government. Most funds provided by the State government are for core activities on the mainland, such as the development and maintenance of roads, transportation facilities, drainage systems, recreational areas, and garbage disposal. This was supported by the MBKT officer. According to him, “*We have to give priority to the maintenance of the public facilities on the mainland compared with the island because the mainland is our primary responsibility*”. Only extra capitals are utilised to

maintain the public amenities on the islands. Observations on the islands also indicate that local authorities are putting less effort and funds into the development and maintenance of the public amenities on the islands. For example, existing public toilets are not maintained. Some beaches have no public toilets, waste bins, proper landscape areas, seating, or pedestrian walkways. Thus, it can be suggested that the State Government should allocate separate development and maintenance funds for local authorities to utilise for the development of the MPIs.

Another significant finding was that the Department of Marine Park Malaysia (DMPM) receives Marine Park entrance fees. Four local officers address their concerns regarding the entrance fees. According to them, local authorities should collect the marine park entrance fees because local governments oversee the development and maintenance of the amenities on the islands; meanwhile, DMPM's task is only to protect and conserve the marine biodiversity. Split jurisdiction between the local and the federal government in managing MPIs is creating many problems regarding management and fund distribution. Local authorities' officers suggested that local authorities should be entirely in charge of the MPIs' development, management, taxes and entrance fee collections. Consequently, this will ease local authorities in managing the islands properly.

2) Lack of Staff

Concerning the lack of staff, all the officers stated that this is the most significant barrier. According to Rahimi Abidin (2025), resource constraints such as a lack of manpower are one of the barriers on the Tioman island. Discussions with the officers indicated that only one officer from each department oversees the planning and solid waste management of the islands. Moreover, the same officer oversees managing mainland matters. The MBKT planning officer said, *"Currently, our department has a shortage of staff. I'm alone in charge of the planning matters for the mainland and Redang Island."* While the MDB planning officer informed, *"I'm alone in charge of the Perhentian Island and the Besut district"*.

The Department of Municipal Services and Licensing are having a similar problem. As the MDB officer informed, *"I'm alone tasked to monitor the cleanliness of the Perhentian Kecil and Besar Island"*. Meanwhile, the TDA officer stated: *"I need more staff to visit all the villages on Tioman Island to see whether the waste contractor is doing his job properly"*. These findings indicate that a lack of staff is making monitoring, inspection and enforcement difficult. Therefore, many issues arise on the MPIs, such as illegal extension and development, destruction of ecological assets, dredging, contamination of water bodies, excessive disposal of garbage in the sea and forest area, open burning,

land clearing and damage to public amenities. The finding agrees with the previous studies, which mentioned that a lack of staff is a significant barrier (Abdul Khalid et al., 2013; Marang, 2014; Yates et al., 2013). State governments are responsible for hiring staff for local authorities. Therefore, it is the state government's responsibility to appoint more staff for better management of the islands.

3) Time Constraint

In terms of time constraints, all the officers stated that they are very busy conducting regular inspections and monitoring the islands because their main tasks are to provide services to the public on the mainland. As the MBKT planning officer put it: *"Planning staff usually are very busy because they have to handle planning applications on the mainland"*. The MDM planning officer said: *"Site inspections are not conducted frequently on the island because our primary responsibilities are on the mainland. Moreover, we have a shortage of staff"*. Moreover, the TDA Licensing officer informed: *"We lack staff. Therefore, we do not have enough time to monitor all the areas on the island"*. These findings indicate that the time constraint barrier is strongly related to the lack of staff barrier. The result is also consistent with the previous literature (Khalid et al., 2013; Brokaj, 2014). Local authorities need to have more staff, and staff need to be appointed specifically for the management of the MPIs to overcome the time constraint barrier.

4) Substantial Distance from the Mainland

Substantial distance from the mainland is also identified as the primary barrier for some local authorities. Substantial distance from the mainland hinders officers from doing frequent monitoring and enforcement. However, officers have no problem conducting frequent inspections of islands located near the mainland. For example, MDM (Kapas Island) and TDA Branch (Tioman Island) officers have no difficulties conducting frequent monitoring compared to MBKT (Redang Island) and MDB (Perhentian Island) officers. Therefore, substantial distances from the mainland impede monitoring and enforcement. Consequently, to overcome this barrier, local authorities should hire officers to stay on the islands to do frequent monitoring.

5) Lack of Commitment from Top Management

Malaysia uses the Westminster system, where the head of State is a Minister appointed by the Sultan from the winning party. Different ministers have different mandates and directions. Some ministers might have a strong vision to develop a State as a tourism hub, while others may have the idea to develop a State as an industrial hub. A five-year period for ministers is a very short time to implement

any ideas. Frequent changes of ministers, mandates and directions hinder the proper development and management of the islands. As one officer informed, they submitted several proposals to the State Government to improve utilities on the islands, such as to have incinerators and to have proper sewage treatment plants. However, the State Government did not approve the proposal. While another officer said, *"If the previous Chief Minister is still in charge, the incinerator project and the four generators installation on the island have been approved"*.

Any development and management decision on the islands comes from senior officials. According to the officers, development proposal, inspection, maintenance and monitoring are only conducted when they receive direction from top management. As the MBKT planning officer stated, *"We cannot do anything. Our top management is responsible for making any decision for us"*. While the MDB planning officer said, *"We take action after receiving instructions from our bosses"*. Therefore, the federal government needs to educate, encourage or push top management staff at the state and local government level to be more proactive in developing and managing the islands sustainably.

6) Lack of Intergovernmental Coordination and Collaboration

The lack of collaboration between intergovernmental agencies is another barrier (Lim et al., 2024). As the TDA planning officer informed, *"We only have once in a while technical meeting with other local authorities and government agencies once in a while"*. Moreover, the MBKT planning officer said, *"We have technical meetings at the State level once a year"*, and the MDB officer also informed, *"We rarely have meetings with other local authorities regarding planning issues on the islands"*. These findings indicate that meetings with other local authorities or agencies are not conducted regularly.

A similar issue also occurs in the Department of Municipal Services and Licensing. MDB Licensing officer informed, *"Department of Marine Park Malaysia has conducted a program due to the celebration of World Ocean Day at the Perhentian Island. They did not invite us to join the program. After the program, we must clean up all the garbage"*. Whereas, the TDA officer informed that villagers and operators at Tioman Island always burn their waste every day, which is causing air pollution. This issue was reported to the Department of Environment (DOE) (Terengganu) a few times. However, there was a late response from the department.

Lack of communication and collaboration between government agencies causes many environmental and development issues to remain unsolved on islands (Rahimi Abidin et al., 2025). Once-a-year meetings are considered insufficient for the proper management of the islands. Regular discussions between local authorities and other government agencies are required to solve

any issues with the MPIs. Moreover, coordination and collaboration should not end at the meetings but need to be continued up to monitoring, site inspection and enforcement levels. During an investigation, all related government agencies should visit the islands together. According to Zulkefli (2021), local authorities have a limited role in tourism development. Tourism is seen as the main responsibility of the state government, while the local authority only deals with operational matters, such as development, improvement of infrastructure and public facilities, which have been unsuccessful due to financial constraints allocated for tourism development at the federal level.

Specific Barriers Faced by the Town Planning Department

The Department of Town Planning of the islands is facing several barriers. The barriers are illegal construction and development of chalets, lack of development plans and programs, and lack of communication and collaboration from operators.

1) Illegal Construction and Extension of MSICs

One of the planning problems on the MPIs is the illegal construction and extension of tourism accommodations. As the MBKT planning officer said, *“The problem on the Redang Island is that chalet operators like to do an illegal extension of their resorts and chalets”*. Whereas, according to an MDM officer, *“Chalet’s operators on the island are building their chalets illegally during monsoon seasons”*. Most of the operators never apply for approval for development and extension. However, some operators do apply only after finishing the building. Interestingly, this study also found that recently built chalets are not following the planning and building guidelines. For example, the MBKT officer said, *“Many resort operators extend their resort and chalets without applying for approval from the local authority. It's hard for us to act against them because most of the operators are politicians or connected to some politician”*.

Moreover, the MDM officer informed that some chalet operators submit fake plans for approval. During construction, they use a different plan. These findings revealed that illegal building and extension of chalets are due to the lack of inspection and enforcement on the islands. Local authorities are unable to do frequent inspections on the islands due to political interference, lack of staff, (lack of time and substantial distance from the mainland. All the barriers need to be addressed so that monitoring can be conducted frequently on the islands.

2) Lack of Development Plans and Programs for the MPIs

All the officers agreed that there are no tourism development plans and strategies available for MPIs. As the MDM officer said: *“We do not have short- or long-*

term development plans for Kapas Island, but we are thinking of creating one". Other officers also give similar statements. The lack of development plans and strategies at the local level is hindering officers from managing the islands properly. Therefore, local authorities often overlook the management of the islands with the idea that islands are the responsibility of the operators and tourism agencies because they are the ones who receive direct tourism profits. This finding indicates that local authorities do not give thoughtful attention to tourism in the development of the islands. This finding is consistent with the finding above that local authorities rarely do monitoring and maintenance of infrastructures on the MPIs. Therefore, the suggestion is that local authorities need to formulate their short and long-term development plans for tourism islands based on the sustainable tourism development policy as specified by MOTAC under the National Ecotourism Plan.

3) Lack of Involvement and Communication with Chalet Operators

Lack of involvement and communication from the chalet operators is another barrier. According to the officers, there is a lack of communication from the operators. Operators rarely approach local authorities regarding planning matters. The TDA officer informed that 70% of the chalet developments on the islands are conducted without approval. Meanwhile, the MDB officer said, government officials are not welcome on the islands due to mistrust and misperceptions. According to him, *"Once before our staff visited the Island for inspection. Some operators came with machetes. Since then, our officers requested police and land officers to escort us during an inspection"*.

Another finding is that operators on the islands do not support programs held by local authorities. All the officers were informed that only a few operators usually turn up for any programs. As the MDM officer said, *"We usually conduct meetings with the chalet operators at the Kapas Island. However, not many operators will turn up"*. While the MDB officer informed, *"Every time we call operators for discussion, the majority of them do not come"*. Hence, this finding indicates that chalet operators give less attention and cooperation to the programs conducted by local authorities. A possible explanation for the lack of involvement is a centralised government operating style where local communities and tourism stakeholders' opinions are not considered in making policies and strategies. Therefore, local authorities must involve chalet operators and stakeholders during meetings. Their views should be considered in formulating strategies and plans for the islands.

Specific Barriers Faced by Municipal Services and Licensing Department

Local authorities are facing several specific barriers in managing solid waste on the islands. Solid waste is one of the major issues on the MPIs. Improper

management of the solid waste on the islands causes adverse impacts on the marine ecological assets. The barriers are careless attitudes of waste contractors, a lack of support from chalet operators in reducing waste, and technical problems of waste boats.

1) Careless Attitude of Waste Contractors

Improper management of solid waste on the islands is strongly related to the careless attitude of the waste contractors. According to the MBKT officer, local authorities should hire waste contractors based on a yearly contract. However, due to the lack of waste contractors, local authorities usually prolong their contracts for up to five years. The long duration of the contract makes contractors careless in carrying out their duties. As the MBKT officer said, *“He is a little lazy because he has already worked for five years”*. The officers also informed that some of the waste contractors like to dump garbage in the sea and force chalet operators to pay additional charges.

The officers also informed that a lack of staff, time and a substantial distance from the mainland impede them from monitoring waste contractors frequently. Officers only act when chalet operators make complaints, which is not very frequent. The suggestion is that local authorities should hire one or two islanders to monitor waste contractors' operations. Waste contractors should be penalised for deception. Moreover, local authorities should renew waste contractor permits based on their performance.

2) Lack of Support from Chalet Operators in Reducing Waste on the Islands

Chalet operators on the islands produce an enormous amount of waste. All the officers stated that operators give less support and effort in reducing their waste. As the MDB officer said, *“Most of the operators are not conducting recycling”*. MDB officer informed that the Council had conducted several programs regarding waste management and recycling for the island operators, but the number of operators who participated was disappointing. The MDM officer also stated that most of the Kapas operators are not separating their waste. They mixed wet and dry waste, which became a problem at the mainland landfill. All the officers have similar comments on this matter.

3) Small and Unsuitable Waste Boats

Small and unsuitable waste boats are a barrier for the local authorities. According to MDB officers, it is difficult to find waste contractors and suitable waste boats. Fisherman boats are not designed to collect waste. Garbage bags and leachate water frequently fall into the sea from the boats. Small boats are unable to collect all garbage bags on the same day. Another problem is that waste boats are easily inoperable due to the substantial distance from the mainland. Inoperative boats

cause waste to pile up on the islands for a few days. Consequently, local authorities should consider buying or hiring appropriate waste boats. Again, lack of funds is the main hindrance.

CONCLUSION

In conclusion, this study has identified several common and specific management barriers faced by the local authorities. The six common barriers are the lack of funding, the lack of staff, time constraints, the lack of commitment from top management, the lack of intergovernmental coordination/collaboration, and substantial distance from the mainland. These barriers are faced by most of the local authorities in the world, and Malaysia. The three specific barriers faced by the planning departments are illegal construction and extension of chalets, lack of development plans and programs for MPIs, and lack of involvement and communication with chalet operators. Three specific management barriers faced by the Municipal departments are careless attitudes of waste contractors, a lack of support from operators to reduce waste on the islands, and small and unsuitable waste boats. Consequently, the recommendations from this study can help local authorities formulate suitable plans and strategies to manage tourism development in the MPIs in a more sustainable manner.

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