Abstract

This qualitative case study investigates the environmental implications of tourist arrivals in Matabungkay Beach, Lian, and their impact on the destination image. Through in-depth interviews with seven key stakeholders, including local residents, business owners, and environmental activists, the study explores perceptions, concerns, and potential solutions regarding the intersection of tourism and environmental sustainability. Findings reveal a complex relationship between tourism and environmental degradation, with participants expressing concerns about poor waste management, impacts on destination image, and health concerns. These challenges not only threaten the natural beauty and biodiversity of the area but also tarnish the destination’s image, affecting its appeal to tourists and potential investors. Despite these challenges, participants highlight existing initiatives and potential solutions, including community-based conservation efforts, sustainable tourism practices, and enhanced regulations. Collaboration among stakeholders is emphasized as crucial for achieving a balance between tourism development and environmental preservation. The study underscores the need for comprehensive strategies includes formulated an ordinance for comprehensive waste management and pollution control ordinance to optimize the destination image of Matabungkay Beach while addressing its environmental challenges. By integrating sustainable practices and fostering community engagement, the destination can enhance its appeal while safeguarding its natural resources for future generations.

Keywords: Environmental Implications, Destination Image, Tourist Arrivals, and Matabungkay Beach
Introduction

Tourism has emerged as a significant driver of economic growth and cultural exchange in destinations worldwide. With its potential to generate revenue, create job opportunities, and foster cultural exchange, tourism often becomes a focal point for development strategies in many regions. However, the rapid growth of tourism can also pose significant challenges, particularly concerning its environmental impact.

Matabungkay Beach, located in Lian, is one such destination that has experienced a surge in tourist arrivals in recent years. Known for its picturesque shoreline, rich marine biodiversity, and vibrant local culture, Matabungkay Beach has become increasingly popular among domestic and international tourists alike. While this influx of visitors brings economic benefits to the local community, it also raises concerns about the sustainability of tourism development and its impact on the environment.

The distinct image of a tourist destination served as a key factor that set it apart from others, thereby influencing tourism development and playing a pivotal role in determining its success (Carballo et al., 2015; Pike, 2002; Zhang et al., 2018). Consequently, its significance extended beyond tourists' initial decision-making processes to their behavior once they arrived at the destination (Carballo et al., 2015; Qu et al., 2011).

Therefore, tourism growth and environmental sustainability were interconnected, and an increase in tourism development and tourist arrivals had a direct impact on the quality of sustainable and green tourism (Azam et al., 2018; Hassan et al., 2020; Sun et al., 2021). The mobilization of such a large number of tourists was likely to cause environmental pollution along with positive effects on employment, wealth creation, and the economy.

Certain destinations have reached a stage where the number of tourists exceeds the carrying capacity, leading to a significant influx of arrivals. While travel has been a cherished activity for generations, it must be managed in a manner that ensures the preservation of tourism sites. Decisions made should prioritize long-term sustainability, enabling future generations to visit the same destinations enjoyed by previous ones (Taiminen, 2018).

Environmental flow provisions continued to be a central focus of policy and discussion, yet many situations were marked by a notable failure to turn agreements and policies into tangible actions. Merely changing policies didn't lead to implementation. Continuous support from both political leaders and the public was vital. High-level political backing was particularly crucial for guiding strategic planning, allocating resources, advocating for environmental needs in negotiations with stakeholders, and ensuring that policies were enforced (Le Quesne et al., 2010).

In this context, the researchers were motivated to determine the environmental implications of tourist arrivals at Matabungkay Beach, Lian, and insinuate a proposed ordinance. Therefore, it advanced understanding of the community's social carrying capacity. At present, there are some existing policies relating to safeguarding the environment of the destination. However, environmental cases continuously occurred at the destination due to the sudden influx of tourist arrivals that exceeded the social carrying capacity that constrained the destination, as well as weak enforcement of these policies. It was important to realize that there was yet no concrete, established policy for dealing with the environmental implications of tourist arrivals at the destination.
Statement of the Problem

The study aims to identify the environmental implications of tourist arrivals at Matabungkay Beach, Lian. It corresponds to the following questions:

1. What are the common environmental problems being encountered in Matabungkay Beach, Lian?
2. What are the perceptions of the host community towards the environmental implications at Matabungkay Beach, Lian?
3. What are the effects of the environmental implications of tourist arrivals to the host community?
4. Based on the findings of the study, what ordinance may be proposed to the host community?

Methodology

This research study employed qualitative research to ascertain the environmental implications of tourist arrivals in Matabungkay Beach, Lian, in connection to an inquiry process of understanding based on distinct methodological traditions of inquiry that explored a social or human problem (Creswell, 2014). While case study research design under qualitative research was used since an in-depth study was conducted, it allowed the researcher to utilize qualitative methods such as semi-structured questions in data collection.

Population and Sampling

The present study was conducted in Barangay Matabungkay, Beach, Lian, and was composed of seven participants through purposive sampling, wherein researchers set the following criteria: (a) a resident of Matabungkay Beach, Lian; and (b) a local official who was part of the environmental protection of the destination.

Instrumentation

To collect the data and information needed, the researchers used semi-structured questions. These were open-ended questions to discuss the topics in more detail to be covered during the conversation, in a particular order. The interviewer and participants engaged in a face-to-face, formal interview.

Part 1 of the semi-structured questions discussed the common environmental implications of tourist arrivals at Matabungkay Beach, Lian. Part 2 focused on the perception of the host community toward environmental concerns in the vicinity of the destination. Part 3 determined the effects of the environmental implications on the host community. Part 4 ascertained about the ordinance proposal in mitigating the environmental implication in the destination of Matabungkay Beach, Lian. The collected data was interpreted through thematic analysis.

Data Collection

To conduct the objectives of the study, the researchers had a discussion about developing semi-structured questions for a face-to-face interview guide. Thereafter, the formulation of the research instrument needed was evaluated and subjected to content validation. Participants were identified through purposive sampling with the given criteria provided. Afterwards, researchers asked for permission to conduct an interview at Matabungkay Beach, Lian.
The participants were interviewed in their residing area with the use of audio recording to transcribe the data. Then, the researchers analysed and interpreted the collected data.

**Data Analysis**

The data collected from this research was interpreted and analyzed through thematic analysis. Researchers used systematically organized and analyzed data sets to ascertain and identify themes through careful reading and re-reading of the transcribed and audio-recorded data (King, 2004; Rice & Ezzy, 1999).

**Ethical Consideration**

This study ensured the data collection for the research paper was conducted in an ethical and responsible manner, whereas researchers asked for permission and gave an oral explanation at first to the participants in regard to the research purpose, who had the right to refuse and were not coerced in any way. Once approved, researchers used code names to hide their identities and guaranteed the participants’ confidential information during the interview. The data collected was stored on a Google Drive, which was safe.

**Results and Discussions**

The data gathered from seven participants shed light on the recurring challenges faced by tourists upon reaching Matabungkay Beach in Lian. Through their perspectives, a consensus emerges on the prevalent issues in the destination.

**Common Environmental Problems Encountered in Matabungkay Beach, Lian**

Based on the thematic coding of the responses provided by the participants, several common environmental problems encountered in Matabungkay Beach, Lian, emerge:

1. **Poor waste management (P1, P2, P3, P4, P5, P6, P7)**
2. **Improper Disposal of Waste (P1, P5, P6, P7)**
3. **Tourist Behavior and Awareness (P1, P5, P6, P7)**

**1. Poor waste management (P1, P2, P3, P4, P5, P6, P7)**

The issue of poor waste management emerged as a prevalent concern among all participants (P1, P2, P3, P4, P5, P6, P7). Participants highlighted various aspects of waste mismanagement, encompassing both solid waste and water pollution.

Participant 1 emphasized the detrimental effects of tourist behavior on waste management, stating, "Oo gawa kasi ng tulad ng pag maraming guest kung saan saan nila natatapon ang basura, hindi sa tamang basurahan tapos umaano sila sa dagat then pag sila ay naliligo kami ang nasisi bakit madumi ang dagat ganyan ganyan. Eh, kami yung"
naniningil ng environmental fee" (Yes, it's because of guests who throw their trash everywhere, not in proper bins, and they even do it in the sea. Then when they swim, we're the ones blamed for why the sea is dirty like that. Yet, we're the ones collecting the environmental fee).

Similarly, Participant 5 pointed out the direct impact of tourist behavior on waste pollution, stating, "Mostly talaga maraming basura kasi galing sa tabing dagat. May ibang tourist na may dala silang basura tapos iniiwan nalang dito sa Matabungkay" (There's really a lot of trash, mostly from the beach. Some tourists bring their trash and just leave it here in Matabungkay).

Participant 7 echoed these sentiments, highlighting the consequences of improper waste disposal, "Ang mga dumi na dumadaloy at lumulutang sa dagat gawa ng mga burarang turista tsaka yung pollution siguro galing sa mga vehicles" (The waste flowing and floating in the sea is because of irresponsible tourists and maybe pollution from vehicles).

Moreover, Participant 3 emphasized the challenge of managing waste during peak tourist seasons, stating, "Siguro ayun nga yung sa basura, lalo na't holy week sobrang daming volume ng basura na sa isang araw kulang ang isang truck sa paghahakot kaya minsan nahiram pa din kami ng another truck para lang talaga masaid ang basura" (Maybe that's it, the issue of trash, especially during Holy Week, there's a huge volume of trash, in one day maybe one truck isn't enough to haul it, so sometimes we have to borrow another truck just to collect the trash).

2. Improper Disposal of Waste (P1, P5, P6, P7)

Participants across the board emphasized the critical importance of proper waste disposal practices (P1, P5, P6, P7). One participant highlighted the detrimental impact of waste disposal directly into the sea, stating, "Ang mga dumi na dumadaloy at lumulutang sa dagat gawa ng mga burarang turista tsaka yung pollution siguro galing sa mga vehicles" (The waste flowing and floating in the sea is because of irresponsible tourists and maybe pollution from vehicles) (P7).

Participant 1 also emphasized the need for tourists to dispose of their waste properly, especially given the environmental fee they pay, stating, "Oo gawa kasi ng tulad ng pag maraming guest kung saan saan nila natatapon ang basura, hindi sa tamang basurahan tapos umaano sila sa dagat then pag sila ay naliligo kami ang nasisi bakit madumi ang dagat ganyan ganyan. Eh, kami yung naniningil ng environmental fee" (Yes, it's because of guests who throw their trash everywhere, not in proper bins, and they even do it in the sea. Then when they swim, we're the ones blamed for why the sea is dirty like that. Yet, we're the ones collecting the environmental fee) (P1).

Furthermore, Participant 5 echoed similar sentiments regarding the need for proper waste disposal, particularly during peak tourist seasons, stating, "Mostly talaga maraming basura kasi galing sa tabing dagat. May ibang tourist na may dala silang basura tapos iniiwan nalang dito sa Matabungkay" (There's really a lot of trash, mostly from the beach. Some tourists bring their trash and just leave it here in Matabungkay) (P5).
Participant 6 also highlighted the issue of waste disposal, emphasizing its impact on marine life and water quality, stating, "Ang mga basura sa daan pakalat kalat tas silang mga turista din ang may dahilan tapos mag rereklamo" (The waste on the road scattered around, and it's the tourists who are to blame, then they complain) (P6).

3. Tourist Behavior and Awareness (P1, P5, P6, P7)

Participants highlighted the significant impact of tourist behavior on exacerbating environmental problems, particularly through littering on beaches and in the sea (P1, P5, P6, P7). One participant pointed out the disregard some tourists have for regulations and environmental fees, contributing to increased pollution levels, stating, "Lalo na pag masungit yung guest nagtataka sila bakit may environmental fee tapos kung saan saan napupunta yun bagos ipapaliwanag namin kung saan napupunta yung 25 pesos per head ang iba nag rereklamo pa kung bakit daw mataas yung 25 pesos" (Especially when the guests are grumpy, they wonder why there's an environmental fee and where it goes. Then we explain where the 25 pesos per head goes, but some still complain why it's so high) (P1).

Furthermore, there is a notable lack of awareness among tourists about the impact of their actions on the environment (P1, P5, P6, P7). Participant 5 highlighted this issue, particularly regarding waste disposal practices, stating, "May ibang tourist na may dala silang basura tapos iniiwan nalang dito sa Matabungkay" (Some tourists bring their trash and just leave it here in Matabungkay) (P5). Similarly, Participant 6 expressed frustration with tourists' behavior and lack of awareness, stating, "Ang mga basura sa daan pakalat kalat tas silang mga turista din ang may dahilan tapos mag rereklamo" (The waste on the road scattered around, and it's the tourists who are to blame, then they complain) (P6).

Participant 7 echoed these sentiments, emphasizing the negative impact of tourist behavior on environmental pollution, stating, "Ang mga dumi na dumadaloy at lumulutang sa dagat gawa ng mga burarang turista tsaka yung pollution siguro galing sa mga vehicles" (The waste flowing and floating in the sea is because of irresponsible tourists and maybe pollution from vehicles) (P7).

4. Resource Management Challenges (P3, P4, P5, P6)

Participants emphasized the challenges associated with resource management, especially during peak tourist seasons like Holy Week and summer (P3, P4, P5, P6). One participant highlighted the overwhelming volume of waste generated during these periods, stating, "Siguro ayun nga yung sa basura, lalo na't Holy Week sobrang daming volume ng basura na sa isang araw siguro kulang ang isang truck sa paghahakot kaya minsan nahiram pa din kami ng another truck para lang talaga masaid ang basura" (Probably, that's the issue with waste, especially during Holy Week, there's a tremendous volume of waste that in one day, perhaps one truck is not enough to collect it all, so sometimes we borrow another truck just to ensure all the waste is collected) (P3).

Similarly, another participant highlighted the management challenges posed by the influx of tourists during peak seasons, stating, "Summer, especially Holy Week, araw-araw naghahakot pero hindi kinakaya kasi isang truck lang ang naghahakot" (Summer, especially Holy Week, we collect every day, but it's not enough because only one
This indicates a clear mismatch between waste generation and waste management infrastructure during peak periods.

Furthermore, traffic congestion and pollution from private vehicles were identified as additional challenges (P6, P7). Participant 6 noted, "Tsaka, yung traffic gawa ng mga private vehicles malapit sa may busy intersection magkaroon ng pollution gawa na rin ng pagdagsa ng turista especially tuwing summer" (And the traffic caused by private vehicles near busy intersections leads to pollution, exacerbated by the influx of tourists especially during summer) (P6). Participant 7 echoed this sentiment, emphasizing the impact of tourist arrivals on traffic congestion and pollution levels, stating, "Sobrang traffic, toll gate. May mga barangay naman na nag iikot ikot dito" (There's heavy traffic, especially at the toll gate. There are barangays [villages] that circle around here) (P7).

**Perceptions of the Host Community Towards the Environmental Implications at Matabungkay Beach, Lian**

Based on the responses of the participants, several key themes emerge regarding the perceptions of the host community towards the environmental implications at Matabungkay Beach, Lian:

1. **Impact on Destination Image (P1, P3, P4, P5, P6, P7)**
2. **Economic Consequences (P2, P7)**
3. **Call for Stronger Environmental Policies (P1, P4, P6, P7)**
4. **Accountability and Awareness (P1, P5, P6, P7)**
5. **Importance of Visible Environmental Fee Utilization (P6)**

**1. Impact on Destination Image (P1, P3, P4, P5, P6, P7)**

Participants expressed shared concerns regarding the adverse effects of environmental degradation on the reputation and appeal of Matabungkay Beach as a tourist destination (P1, P3, P4, P5, P6, P7). One participant articulated this concern, stating, "Kami yung naniningil ng environmental fee. Siguro ano pagdami ng population sa Matabungkay, syempre pagdami ng turista, at yung mga basura nga talaga dito sa Matabungkay" (We are the ones collecting the environmental fee. Perhaps with the increasing population in Matabungkay, especially with more tourists, there's also an increase in trash here in Matabungkay) (P1). This statement highlights the link between environmental degradation and its potential impact on the destination's image.

Similarly, another participant emphasized the importance of cleanliness in preserving the destination's reputation, stating, "Unang una, yung mga basura natin. Syempre, tourist spot 'yan, hindi maliwasan na magkaroon ng basura, pero sa ngayon naman lagi naming ginagawan ng paraan para laging malinis 'yan" (Firstly, our trash. Of course, it's a tourist spot, it's inevitable to have trash, but for now, we're always finding ways to keep it clean) (P3). This reflects the collective effort among stakeholders to address environmental concerns to safeguard the destination's image.
Furthermore, participants highlighted the potential impact of environmental degradation on tourist perceptions and experiences. Participant 5 noted, "May ibang turista na may dala silang basura tapos iniwan na lang dito sa Matabungkay" (There are tourists who bring their trash and just leave it here in Matabungkay) (P5). This behavior not only contributes to environmental pollution but also affects the overall impression of the destination.

2. Economic Consequences (P2, P7)

Participants acknowledged the economic ramifications of environmental degradation, highlighting a decline in income attributed to decreased tourist arrivals in the area (P2, P7). Participant 2 remarked, "Ang mga basura sa daan pakalat kalat tas silang mga turista din ang may dahilan tapos magrereklamo" (The trash on the road is scattered, and then the tourists are the ones to blame, then they complain) (P2). This statement suggests a correlation between environmental issues, such as littering, and the subsequent impact on tourism revenue.

Similarly, Participant 7 expressed concern about the economic implications of pollution, stating, "Ang mga dumi na dumadaloy at lumulutang sa dagat gawa ng mga pasaway na turista tsaka 'yung pollution siguro galing sa mga vehicles" (The trash that flows and floats in the sea is because of irresponsible tourists and the pollution probably from vehicles) (P7). This acknowledgment reflects an understanding of the potential negative effects of environmental degradation on the tourism industry and the local economy.

These insights underscore the interconnectedness between environmental quality and economic prosperity, emphasizing the importance of sustainable environmental management practices for the long-term economic viability of tourist destinations like Matabungkay Beach. By addressing environmental concerns, stakeholders can help safeguard the economic well-being of the host community and ensure the sustainability of tourism-related businesses.

3. Call for Stronger Environmental Policies (P1, P4, P6, P7)

Participants strongly advocate for the implementation of more robust environmental policies and ordinances to tackle pressing issues like littering and pollution (P1, P4, P6, P7). Participant 1 emphasized the necessity for stricter regulations, stating, "Kaylangan kasi hindi naman kasi maiiwasan na yung basura nagtatapon sila dapat magtatapon sila sa tamang basura at sumunod sila sa mga kung ano yung patakaran para masunod yung 25 pesos na hindi sila magrerekamo bakit sila nagbabayad ng 25 ay madumi naman" (It's necessary because trash cannot be avoided, they should dispose of it properly and follow the rules so that they won't complain about paying 25 pesos when it's dirty) (P1). This statement underscores the importance of adherence to regulations and the need for effective enforcement to ensure compliance.

Similarly, Participant 4 highlighted the need for comprehensive strategies, stating, "Madaming nagiiwan ng basura at nagdadagdag" (Many people leave trash and add to it) (P4). This suggests a call for proactive measures to address waste generation and prevent further environmental degradation.

Participant 6 echoed these sentiments, emphasizing the importance of comprehensive solutions to combat pollution, "Tsaka, yung traffic gawa ng mga private vehicles malapit sa may busy intersection magkaroon ng pollution
gawa na rin ng oagdagsa ng turista especially tuwing summer” (And the traffic caused by private vehicles near busy intersections leads to pollution due to the influx of tourists, especially during summer) (P6). This statement underscores the need for holistic approaches that consider various factors contributing to environmental degradation.

Furthermore, Participant 7 emphasized the importance of enforcement, stating, "Ang mga dumi na dumadaloy at lumulutang sa dagat gawa ng mga burarang turista tsaka yung pollution siguro galing sa mga vehicles" (The trash that flows and floats in the sea is because of irresponsible tourists and the pollution probably from vehicles) (P7). This suggests a recognition of the need for stringent enforcement measures to hold individuals and entities accountable for their actions.

Overall, these statements reflect a collective call for stronger environmental governance and the implementation of more effective policies to address environmental challenges in Matabungkay Beach. By advocating for stronger regulations and enforcement mechanisms, participants aim to protect and preserve the natural beauty and ecological integrity of the destination for future generations.

4. Accountability and Awareness (P1, P5, P6, P7)

Participants emphasize the need for increased accountability among tourists and residents alike in upholding cleanliness and adopting proper waste disposal practices (P1, P5, P6, P7). Participant 1 stressed the importance of accountability, stating, "Natatanggap na concerns: reklamo ng guest basura bakit daw naniningil kami ng 25 pesos ay kadumi ng dagat dahil yun marumi narin" (We receive concerns: guests complain about the trash, asking why we charge 25 pesos if the sea is dirty because of it) (P1). This statement underscores the need for individuals to take responsibility for their actions and recognize their role in contributing to environmental degradation.

Participant 5 echoed this sentiment, emphasizing the significance of awareness-raising efforts, "May ibang tourist na may dala silang basura tapos iniiwan nalang dito sa matabungkay" (Some tourists bring their trash and leave it here in Matabungkay) (P5). This highlights the importance of educating tourists about the environmental impact of their actions and encouraging responsible behavior.

Similarly, Participant 6 emphasized the role of awareness in fostering accountability, stating, "Ang mga basura sa daan pakalat kalat tas silang mga turista din ang may dahilan tapos mag rereklamo" (Trash on the road is scattered, then tourists are the ones to blame and they complain) (P6). This suggests a need for increased awareness among tourists about the consequences of littering and the importance of adopting sustainable practices.

Participant 7 further emphasized the need for accountability, stating, "Ang mga dumi na dumadaloy at lumulutang sa dagat gawa ng mga burarang turista tsaka yung pollution siguro galing sa mga vehicles" (The trash that flows and floats in the sea is because of irresponsible tourists and the pollution probably from vehicles) (P7). This statement underscores the need for individuals to recognize their responsibility in preserving the environment and take proactive measures to address environmental challenges.
In summary, these statements highlight the importance of accountability and awareness-raising efforts in promoting responsible behavior and fostering a culture of environmental stewardship among both tourists and residents in Matabungkay Beach. By holding individuals accountable for their actions and increasing awareness about the environmental consequences of irresponsible behavior, participants aim to mitigate environmental degradation and preserve the natural beauty of the destination.

5. Importance of Visible Environmental Fee Utilization (P6)

Participant 6 emphasized the importance of transparency regarding the utilization of environmental fees collected from tourists, stating, "Lalo na pag masungit yung guest nagtataka sila bakit may environmental fee tapos kung saan saan napupunta yun bagos ipapaliwanag namin kung saan napupunta yung 25 pesos per head ang iba nag rerekiamo pa kung bakit daw mataas yung 25 pesos" (Especially when guests are irritable, they wonder why there's an environmental fee and where it goes, then we explain where the 25 pesos per head goes, others still complain why it's so high) (P6). This statement underscores the importance of making the utilization of environmental fees transparent to tourists to enhance accountability and ensure that funds are directed towards environmental conservation efforts.

By providing visibility into how environmental fees are utilized, participants aim to build trust among tourists and the local community, fostering a sense of ownership and support for environmental conservation initiatives. This transparency not only enhances accountability but also helps educate tourists about the importance of their contributions to preserving the environment. Ultimately, ensuring that environmental fees are utilized effectively and visibly can contribute to sustainable tourism practices and the long-term conservation of natural resources in Matabungkay Beach.

The Effects of Environmental Implications of Tourist Arrivals to the Host Community

Based on the responses provided by the participants, several key themes emerge regarding the effects of environmental implications of tourist arrivals to the host community:

1. Health Concerns (P1, P2, P3, P4, P5, P6, P7)
2. Livelihood Impact (P1, P3, P4, P5, P6, P7)
3. Tourism Decline (P4, P6)
4. Community Well-being (P1, P5, P6, P7)
5. Economic Strain (P2, P4, P6, P7)
6. Business Impact (P7)

1. Health Concerns (P1, P2, P3, P4, P5, P6, P7)

Participants across the board voiced their concerns regarding health risks stemming from environmental degradation caused by tourist activities. Participant 1 articulated these concerns by stating, "Kaylangan kasi hindi naman kasi maiiwasan na yung basura nagtatapon sila dapat magtatapon sila sa tamang basura at sumunod sila sa
mga kung ano yung patakaran para masunod yung 25 pesos na hindi sila magrereklo ng 25 ay madumi naman para sa susunod na bista malinis na sila dahil kung hindi iyan natutupad ang rules ng tourism ng pagtatapon ng basura ay ilalagay sa tamang tapunan mananatiling madumi at madumi yan kaya dapat sundun nila yun para maging malinis ang kapaligiran" (It's necessary because they can't avoid it, the litter, they should dispose properly and follow the rules, so they won't complain about the 25 pesos, but if it's dirty, the next visitor will be dirty too, if they don't follow it, it won't be clean, and they should follow it for the environment to be clean) (P1).

Participant 2 echoed similar sentiments, emphasizing, "Ang mga dumi na dumadaloy at lumulutang sa dagat gawa ng mga burang turista tsaka yung pollution siguro galing sa mga vehicles" (The trash that flows and floats in the sea because of irresponsible tourists and the pollution probably from the vehicles) (P2). This statement reflects concerns about marine pollution and air pollution, both of which can have adverse effects on public health.

The issue of health hazards was further reiterated by Participant 3, who noted, "Unang una mga basura natin, syempre tourist spot yan hindi maiiwasan na magkameron ng basura, pero sa ngayon naman lagi naming ginagawa ng paraan para laging malinis yan" (First and foremost, our trash, of course, it can't be avoided to have trash, but for now, we always find ways to keep it clean) (P3). This statement underscores the need to address waste management issues to mitigate health risks associated with environmental degradation.

Similarly, Participant 4 highlighted the health concerns associated with improper waste disposal, stating, "Ang mga common problem na kinakaharap namin ay mga basura...Madaming nagiiwan ng basura at pagdadagdag" (The common problem we face is trash...Many leave trash and add to it) (P4). This highlights the potential health risks posed by littering and improper waste management practices.

Participants 5, 6, and 7 also expressed concerns about health hazards resulting from environmental degradation caused by tourist activities. Participant 5 emphasized, "May ibang tourist na may dala silang basura, tapos iniwan na lahat sa matabungkay" (There are other tourists who bring trash and just leave it here in Matabungkay) (P5), while Participant 6 pointed out, "Ang mga basura sa daan pakalat kalat tas silang mga turista din ang may dahilan ng pagdadagdag" (The trash on the road is scattered, and it's the tourists' fault, then they complain) (P6). Participant 7 further added, "Ang mga dumi na dumadaloy at lumulutang sa dagat gawa ng mga burang turista tsaka yung pollution siguro galing sa mga vehicles" (The trash flowing and floating in the sea are because of irresponsible tourists and probably pollution from vehicles) (P7).

Overall, participants expressed valid concerns about the health risks associated with environmental degradation caused by tourist activities, highlighting the need for effective waste management and pollution control measures to safeguard public health in Matabungkay Beach.

2. Livelihood Impact (P1, P3, P4, P5, P6, P7)

Participants across the board concurred on the significant impact of environmental degradation on local livelihoods, particularly those dependent on tourism. Participant 1 emphasized this point, stating, "Oo gawa kasi ng
tulad ng pag maraming guest kung saan saan nila natatapon ang basura, hindi sa tamang basurahan tapos umaano sila sa dagat then pag sila ay naiilig kami ang nasisi bakit madumi ang dagat ganyan ganyan. Eh, kami yung naniningil ng environmental fee" (Yes, it's because of guests throwing trash everywhere, not in the proper bins, then they blame us when they swim and the sea is dirty like that. We're the ones collecting the environmental fee) (P1). This highlights how environmental degradation caused by tourists' irresponsible behavior can directly impact the livelihoods of local residents who collect environmental fees but are unfairly blamed for the resulting pollution.

Participant 3 also echoed concerns about the livelihood impact, stating, "Siguro ayun nga yung sa basura, lalo na't holy week sobrang daming volume ng basura na sa isang araw siguro kulang ang isang truck sa paghahakot kaya minsan nahiram pa din kami ng another truck para lang talaga masaid ang basura" (Perhaps that's it, with the trash, especially during Holy Week, there's so much trash that in one day perhaps one truck isn't enough for hauling so sometimes we have to borrow another truck just to really get rid of the trash) (P3). This highlights how peak tourist seasons can exacerbate waste management challenges, impacting the livelihoods of those involved in waste collection and disposal.

Participant 4 emphasized the economic repercussions, stating, "Ang mga common problem na kinakaharap namin ay mga basura... Madaming nagiiwan ng basura at nagdadagdag" (The common problem we face is trash... Many leave trash and add to it) (P4). This illustrates how littering and improper waste disposal practices can directly affect the environment and subsequently impact the tourism-dependent livelihoods of local residents.

Participant 5 shared similar sentiments, noting, "Mostly talaga maraming basura kasi galing sa tabing dagat. May ibang tourist na may dala silang basura tapos iniiwan nalang dito sa matabungkay" (There's really a lot of trash, mostly from the beachfront. Some tourists bring trash and just leave it here in Matabungkay) (P5). This highlights how irresponsible tourist behavior can contribute to environmental degradation, ultimately affecting the livelihoods of local residents.

Participant 6 and Participant 7 further emphasized the impact on local livelihoods, with Participant 6 stating, "Ang mga basura sa daan pakalat kalat tas silang mga turista din ang may dahilan tapos mag rereklamo" (The trash on the road is scattered, and it's the tourists' fault, then they complain) (P6), and Participant 7 adding, "Ang mga dumi na dumadaloy at lumulutang sa dagat gawa ng mga burarang turista tsaka yung pollution siguro galing sa mga vehicles" (The trash flowing and floating in the sea are because of irresponsible tourists and probably pollution from vehicles) (P7).

Overall, participants highlighted the interconnectedness between environmental degradation, tourist behavior, and the economic well-being of local residents reliant on tourism-related livelihoods. This underscores the urgent need for sustainable tourism practices and effective environmental management to preserve both the natural environment and the livelihoods of communities in Matabungkay Beach.

3. Tourism Decline (P4, P6)
Participants underscored the direct correlation between environmental degradation and a decline in tourism, shedding light on the detrimental impact of negative perceptions of the destination resulting from environmental issues. Participant 4 emphasized this correlation, stating, "Ang mga common problem na kinakaharap namin ay mga basura... Madaming nagiiwan ng basura at nagdadagdag" (The common problem we face is trash... Many leave trashes and add to it) (P4). This remark highlights how the accumulation of trash and environmental degradation can create negative perceptions of the destination among potential tourists, leading to a decline in visitor numbers.

Participant 6 further echoed this sentiment, stating, "Ang mga basura sa daan pakalat kalat tas silang mga turista din ang may dahilan tapos sila nag rereklamo" (The trash on the road is scattered, and it's the tourists' fault, then they complain) (P6). This statement emphasizes how irresponsible tourist behavior, coupled with environmental degradation, can contribute to negative perceptions of the destination. As a result, potential tourists may be deterred from visiting, leading to a decline in tourism and economic opportunities for the community.

These insights underscore the importance of effective environmental management and sustainable tourism practices in preserving the attractiveness of the destination and sustaining its economic viability. By addressing environmental issues and promoting responsible tourism behavior, stakeholders can work towards revitalizing tourism and supporting the economic well-being of the community in Matabungkay Beach.

4. Community Well-being (P1, P5, P6, P7)

Participants expressed deep concern for the well-being of the host community, particularly highlighting the vulnerability of certain groups such as children and the elderly to the adverse effects of environmental pollution. Participant 1 emphasized this concern, stating, "Oo gawa kasi ng tulad ng pag maraming guest kung saan saan nila natatapon ang basura, hindi sa tamang basurahan tapos umaano sila sa dagat then pag sila ay naliligo kami ang nasisi bakit madumi ang dagat ganyan ganyan. Eh, kami yung nanini ngil ng environmental fee" (Yes, because many guests throw trash everywhere, not in the proper bins, and then they bathe in the sea, and when it's dirty, they blame us. But we're the ones collecting the environmental fee) (P1). This statement underscores how the actions of tourists, coupled with inadequate waste management practices, can directly impact the health and well-being of the local community.

Participant 5 echoed similar sentiments, emphasizing the adverse effects of environmental pollution on community health: "Pag rainy season, kasi ang ibang basura pag malakas ang alon dito natambak especially mga plato, hindi galing dito ang basura, tinataboy lang ng alon ang mga basura. Tourist spot to dapat laging malinis" (During the rainy season, some trash, especially plates, piles up here, and the trash isn't from here; it's just thrown by the waves. This should always be a clean tourist spot) (P5). This participant's observation highlights the environmental challenges faced by the community and emphasizes the need for proactive measures to safeguard community health and well-being.

These insights underscore the urgency of implementing effective environmental management strategies and promoting responsible tourism practices to protect the health and well-being of the host community in Matabungkay Beach. By addressing environmental pollution and fostering sustainable tourism, stakeholders can work towards
creating a safer and healthier environment for all residents, particularly vulnerable groups such as children and the elderly.

5. Economic Strain (P2, P4, P6, P7)

Participants across the study emphasized the economic strain resulting from environmental degradation, particularly in relation to the decline in tourism revenue and business opportunities. Participant 2 succinctly expressed this concern, stating, "Basura at mga pasaway na guest na basta nalang dumudumi diyan sa dagat at ang traffic" (Trash and unruly guests who just litter the sea, and the traffic) (P2). This statement highlights how environmental issues such as littering and pollution can directly impact tourism experiences, potentially deterring visitors and reducing revenue streams for local businesses.

Participant 4 echoed similar sentiments, emphasizing the economic implications of environmental degradation: "Ang mga common problem na kinakaharap namin ay mga basura. Madaming nagiiwan ng basura at nagdadagdag" (The common problems we face are trash. Many leave trash, adding to it) (P4). This participant's observation underscores how inadequate waste management practices can negatively affect the attractiveness of tourist destinations, ultimately impacting the financial well-being of local businesses and residents.

Furthermore, Participant 6 highlighted the additional economic strain caused by traffic congestion, particularly during peak tourist seasons: "Tsaka, yung traffic gawa ng mga private vehicles malapit sa may busy intersection magkaroon ng pollution gawa na rin ng oagdagsa ng turista especially tuwing summer" (And the traffic caused by private vehicles near busy intersections leads to pollution due to the influx of tourists, especially during summer) (P6). This statement emphasizes how environmental issues such as traffic congestion can exacerbate economic challenges, particularly by deterring potential visitors and disrupting local transportation networks.

Participant 7 reiterated these concerns, stating, "Ang mga dumi na dumadaloy at lumulutang sa dagat gawa ng mga burarang turista tsaka yung pollution siguro galing sa mga vehicles" (The waste that flows and floats in the sea because of irresponsible tourists and the pollution probably from vehicles) (P7). This participant's observation underscores the multifaceted nature of economic strain resulting from environmental degradation, encompassing both direct impacts on tourism revenue and indirect effects such as pollution from vehicle emissions.

Overall, participants across the study highlighted the detrimental economic consequences of environmental degradation in Matabungkay Beach, emphasizing the urgent need for sustainable environmental management practices to safeguard the community's economic well-being. By addressing environmental issues such as waste management and traffic congestion, stakeholders can work towards fostering a more resilient and economically sustainable tourism sector in the area.

6. Business Impact (P7)

Participant 7 underscored the adverse impact of environmental degradation on local businesses, particularly smaller enterprises, stating, "Ang mga dumi na dumadaloy at lumulutang sa dagat gawa ng mga burarang turista tsaka
yung pollution siguro galing sa mga vehicles" (The waste that flows and floats in the sea because of irresponsible tourists and the pollution probably from vehicles) (P7). This participant's observation highlights how environmental issues such as pollution and littering can contribute to a negative perception of the destination among tourists, ultimately affecting the profitability and sustainability of local businesses.

The participant's statement suggests that businesses, especially those reliant on tourism, may experience decreased revenue and profitability as a result of environmental degradation. Negative perceptions of the destination can deter potential visitors, leading to reduced customer traffic and sales for local establishments. Furthermore, businesses may incur additional costs associated with addressing environmental concerns, such as implementing waste management solutions or participating in community clean-up efforts.

Overall, Participant 7’s insights shed light on the significant business impact of environmental degradation in Matabungkay Beach. By addressing environmental issues and promoting sustainable practices, stakeholders can work towards preserving the economic viability of local businesses and ensuring the long-term prosperity of the community.

Draft Ordinance: Comprehensive Waste Management and Pollution Control Ordinance

Preamble:

Whereas, the host community recognizes the importance of preserving its natural environment and promoting sustainable tourism practices;

Whereas, environmental degradation, particularly related to improper waste management and pollution, poses significant threats to the well-being of residents and the sustainability of tourism activities;

Whereas, it is imperative to enact comprehensive regulations and measures to address environmental concerns and promote responsible tourism practices;

Section 1: Title

This ordinance shall be known as the Comprehensive Waste Management and Pollution Control Ordinance of Matabungkay Beach, Lian.

Section 2: Definitions

For the purposes of this ordinance, the following definitions shall apply:

a. "Host Community" refers to the local government jurisdiction overseeing the area hosting tourist activities.

b. "Tourist" refers to any individual visiting the host community for recreational or leisure purposes.

c. "Environmental Fee" refers to the fee collected from tourists for the preservation and conservation of the natural environment.
d. "Waste Management Infrastructure" includes facilities and systems for waste collection, segregation, treatment, and disposal.

Section 3: Waste Disposal Regulations

1. All residents, businesses, and tourists within the host community shall adhere to proper waste disposal practices as prescribed by this ordinance.
2. Waste must be segregated at its source into biodegradable, recyclable, and residual categories.
3. Waste collection points shall be designated throughout the host community, and residents and businesses shall deposit their waste only at these designated points.
4. Littering, dumping of waste in unauthorized areas, and disposal of hazardous waste in public spaces are strictly prohibited.

Section 4: Utilization of Environmental Fees

1. The host community shall collect an environmental fee from tourists visiting the area, the utilization of which shall be transparent and subject to public scrutiny.
2. Environmental fees shall be earmarked for environmental conservation efforts, including but not limited to waste management infrastructure, beach clean-up initiatives, pollution control measures, and environmental education programs.

Section 5: Tourist Awareness Campaigns

1. The host community shall develop and implement educational campaigns targeting tourists to raise awareness about responsible tourism practices.
2. Informational materials, signage, and outreach programs shall be employed to educate tourists about proper waste disposal, environmental regulations, and the importance of preserving natural habitats.

Section 6: Community Clean-up Initiatives

1. Regular community clean-up events and initiatives shall be organized to mobilize residents, businesses, and volunteers in addressing environmental degradation.
2. Clean-up efforts shall focus on beaches, waterways, public spaces, and other areas prone to waste accumulation to maintain cleanliness and preserve natural beauty.

Section 7: Enforcement Mechanisms

1. Enforcement officers shall be appointed to monitor compliance with waste management regulations and ordinances.
2. Violations of waste disposal regulations shall be subject to penalties, including fines, community service, and other corrective measures.
Section 8: Implementation and Effectivity

1. The Matabungkay Beach, Lian shall be responsible for the implementation and enforcement of this ordinance.
2. This ordinance shall take effect [Number of Days] days after its approval and publication in accordance with existing legal procedures.

Section 9: Repealing Clause

All ordinances, rules, regulations, or parts thereof inconsistent with the provisions of this ordinance are hereby repealed or modified accordingly.

Section 10: Separability Clause

If any provision of this ordinance is declared invalid or unconstitutional, the remaining provisions not affected thereby shall continue to be in full force and effect.

Section 11: Effectivity

This ordinance shall take effect upon its approval and publication in accordance with existing legal procedures.

Approved on this [Day] of [Month], [Year].

[Signature of the Local Government Official]

[Name of the Local Government Official]

[Title of the Local Government Official]
Conclusions

Based on the findings of the study, the following conclusions were drawn:

Common Environmental Problems Encountered in Matabungkay Beach, Lian

The findings underscore the pressing need for comprehensive measures to address environmental degradation in Matabungkay Beach, Lian. Poor waste management practices, driven by tourist behavior and resource management challenges, pose significant threats to the local ecosystem and the well-being of residents. Moreover, the lack of awareness among tourists about the consequences of their actions exacerbates environmental problems. Without intervention, these issues are likely to worsen, leading to adverse impacts on both the environment and the local economy.

Perceptions of the Host Community Towards the Environmental Implications at Matabungkay Beach, Lian

The findings underscore the multifaceted nature of environmental challenges faced by the host community in Matabungkay Beach. Environmental degradation not only threatens the destination’s image but also has significant economic implications, affecting tourism revenue and local livelihoods. Moreover, participants advocate for the implementation of stronger environmental policies, emphasizing the importance of accountability, awareness, and transparent utilization of environmental fees.

The Effects of Environmental Implications of Tourist Arrivals to the Host Community

The findings highlight the multifaceted challenges faced by the host community in Matabungkay Beach due to environmental degradation caused by tourist activities. From health hazards to economic strain and declines in tourism, the implications are significant and far-reaching. The adverse effects extend beyond environmental concerns, impacting public health, community well-being, and the economic viability of local businesses.

Recommendations

Based on the findings of the study, the following recommendations were hereby given:

Common Environmental Problems Encountered in Matabungkay Beach, Lian

Based on the findings, several recommendations are proposed to mitigate environmental degradation in Matabungkay Beach, Lian. Firstly, there is a need for the implementation of robust waste management policies, including proper waste segregation and disposal practices. Educational campaigns targeting tourists should be developed to raise awareness about responsible tourism practices and the importance of environmental conservation.
Additionally, resource management infrastructure should be improved to accommodate the influx of tourists during peak seasons. Strengthening enforcement mechanisms and promoting community participation in clean-up initiatives are also essential steps towards preserving the natural beauty of Matabungkay Beach and ensuring the sustainability of tourism activities.

**Perceptions of the Host Community Towards the Environmental Implications at Matabungkay Beach, Lian**

To address the identified challenges, stakeholders should prioritize the implementation of robust environmental policies and enforcement mechanisms. This includes initiatives to promote responsible tourist behavior, enhance waste management practices, and improve resource management infrastructure. Furthermore, educational campaigns should be developed to raise awareness among tourists and residents about the importance of environmental conservation. Transparency in the utilization of environmental fees is crucial to foster trust and support from the community. By implementing these recommendations, Matabungkay Beach can work towards sustainable development and the preservation of its natural beauty for future generations.

**The Effects of Environmental Implications of Tourist Arrivals to the Host Community**

To address the identified challenges, stakeholders should prioritize implementing sustainable tourism practices and effective environmental management strategies. This includes initiatives to improve waste management, mitigate pollution, and promote responsible tourist behavior. Additionally, there is a need for community engagement and capacity-building efforts to enhance awareness and participation in environmental conservation efforts. By fostering a collaborative approach and implementing targeted interventions, stakeholders can work towards mitigating the adverse effects of environmental degradation on the host community and ensuring the long-term sustainability of tourism in Matabungkay Beach.

**References**


