

Environmental Sustainability Plan for Resort Hotels in CALABARZON, Philippines

Leonna Marrien U. Asi

International Hospitality Management, Lyceum of the Philippines University, Batangas City, Philippines
mayenasi@yahoo.com.ph

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Abstract - *The study aimed to describe the solid waste management practices of resort hotel in CALABARZON in terms of solid waste type, methods of disposal and disposal practices. To determine the management of sustainable resort-hotel in CALABARZON in terms of preservation, conservation, monitoring progress, rules and regulations, environmental knowledge and sanitation. To test if there is significant difference on the solid waste management practices of employees when grouped according to type, to test if there is a significant difference on the management of sustainable resort hotel between employees and guests. To test if there is significant relationship between solid waste management practices and managing sustainable resort-hotel based on the observation of employees. To develop a plan for a safe environmental and sustainable friendly resort-hotel in CALABARZON. The result showed that the employees' assessment of solid waste management practices of resort-hotel in solid waste type has a composite mean of 3.38, methods of disposal has a composite mean of 3.16 and disposal practices has a composite mean of 3.65. The employees and guests strongly agreed that preservation and sanitation are practices in managing sustainable resort-hotel and agreed in conservation, monitoring process, rules and regulations, and environmental knowledge. There is significant difference on the solid waste management practices of employees when grouped according to type and there is a significant difference on the management of sustainable resort hotel between employees and guests. There is significant relationship between solid waste management practices and managing sustainable resort-hotel based on the observation of the employees.*

Keywords: *Resort hotel, solid waste management, sustainability.*

INTRODUCTION

Environmental sustainability is one of the challenges that the country is facing today. As human population and tourist arrival increases detrimental effects to environment arise. The country is implementing its policies in environmental protection and sustainability to uphold the general welfare of its citizens and future generation. In the hospitality industry, problems arise when tourist and establishments' owner neglect the impact of their decisions, practices and actions to the environment.

The hotel industry put forth efforts to the continuous control of operational cost through sustainable practices such as limiting water and energy consumption and gave a motivation as consumers become interested in choosing accommodations that adhere to the protection of the environment and reduction of its negative impact. Regardless of years of conservation efforts, hotels' energy and resource use is still considerable—but that also opens the way to

further sustainability efforts, which have the double benefit of saving money and benefiting the environment [1].

Every move or initiative, no matter how small, can be the first step in producing a worthy succession of sustainability. Whether through developing best practices for reducing harmful or excessive waste, pledging to starting more eco-friendly supply chains, or forming targeted worker green teams, establishments that promote environmental sustainability as a corporate citizenship imperative can become leaders in the movement to create a sustainable planet, society, and economy for future generations.

According to Mutala [2], the significance of a spotless environment needs not to be over-accentuated for the continued existence of today and the next generation. The public as the principle recipient of a maintainable solid waste management plays an important role. And this will only be possible through the active participation of the community. The

community must realize their role and they need to be empowered. The right policies should be implemented, the community should be aware and participate and the knowledge about the environment and cost sharing must be considered.

According to Lawson [3], hotels are said to be the prime users of resources, and they vastly add up to the accumulation of waste. In the era of Green Economy and strategies being green, recycling would be beneficial not only in the environment but to industry as well. It is necessary for a hotel industry to have their operative waste management system which mainly targets the reduction of waste, reusing useful materials, recycling them in line with the different preservation techniques. Commercial processes have a tendency to generate a lot of waste and need consistent upkeep and expensive waste disposal. Waste management in hotels is needed as disposing waste is becoming both a challenge and an issue. Moreover, it makes good sense to the business when supplies are judiciously used, it saves a lot of money on raw materials. Also, the establishment may earn additional income by selling old resources and by reusing and recycling useful materials.

Nowadays, people continue to experience and witness global warming, environmental degradation and weather changes that is why environmental sustainability is important. Adjacent to growth of the population is the increase in need for additional resources. In order to meet the increasing demand for these resources, more industrial activities also grew around the world. However, these increased industrial activities did not foresee its result to the environment which are land, air and water pollution. The degradation was not considered along with the intended industrial growth, thus, the value proposition of much economic activity ignored these "costs". Typically, the businesses that generated these negative effects on the environment were not held accountable for them. They earned with the use of the different resources and became a factor in the degradation of the environment, yet the society is the one who suffered. Many ecosystems have been badly affected to the point where they can no longer withstand or recover from natural disasters resulting from human activities and such disasters include global warming, flooding and extreme weather conditions [4].

The general purpose of the study was to propose an environmental sustainability plan for resort hotels in CALABARZON.

OBJECTIVES OF THE STUDY

The general purpose of the study was to propose an environmental sustainability plan for resort hotels in CALABARZON. More specifically, to describe the solid waste management practices of resort hotel in CALABARZON in terms of solid waste type, methods of disposal and disposal practices; to determine the management of sustainable resort-hotel in CALABARZON in terms of preservation, conservation, monitoring progress, rules and regulations, environmental knowledge and sanitation; to test if there is significant difference on the solid waste management practices of employees when grouped according to type; to test if there is a significant difference on the management of sustainable resort hotel between employees and guests; to test if there is significant relationship between solid waste management practices and managing sustainable resort-hotel based on the observation of employees and to develop an environmental and sustainable plan for resort-hotels in CALABARZON.

METHODS

The study used descriptive method which focuses at present condition in the purpose to find new truth. This was used to assess the solid waste management practices in managing sustainable resort-hotel in CALABARZON. The questionnaire is one of the major instruments used to gather and collect the needed data. The subjects of the study were guests and employees. They were chosen as the participants because they have enough knowledge about the solid waste management practices of the resort hotel. The study utilized 423 respondents they were consisted of 121 employees and 302 guests coming from the top five DOT accredited resorts hotel in CALABARZON. Raosoft was used to obtain the population of the respondents. It made use of stratified proportionate random sampling to distribute properly the number of respondents in resort-hotel per province of CALABARZON. The study used questionnaire as the major instrument in gathering the necessary data. The questionnaire was based on RA 9003 also known as the Ecological Waste Management Act of 2000 but revisions were made to gather the pertinent data for the study. The main instrument used in the study is the questionnaire. Informal interview with respondents like tourists/guests and employees was also conducted to have additional data for the study. A letter was utilized to formally ask permission to respective heads to conduct the study. The researcher asked permission to the local government to conduct

the survey through telephone and letters. Percentage was used to determine profile of the respondents. Weighted Mean was used to answer the objective number one that is to describe the solid waste management practices of resort hotel in terms of solid waste type, methods of disposal and disposal practices and objective number two that is to determine the management of sustainable resort-hotel in CALABARZON in terms of preservation, conservation, monitoring progress and rules and regulations. Independent sample t- test was used to identify the problems encountered in solid waste management and managing sustainable resort-hotel in terms of community knowledge, environmental knowledge, cost sharing and sanitation and to test if solid waste management practices in managing sustainable resort-hotel is significantly affected by the problems encountered by the guests, residents and employees. Likewise, one-way analysis of variance (ANOVA) was used to test if there is significant relationship between solid waste management practices and managing sustainable resort hotel. The following scale and range was used in the study; 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 – 1.49 = Never. Ethical considerations were practiced by the researcher by ensuring to the respondents that the data that were gathered were treated with utmost confidentiality and for dissertation purposes only.

RESULTS AND DISCUSSION

Table 1 presents the observation of the employees on the solid waste management practices of resort-hotel in CALABARZON in terms of solid waste type which attained a composite mean of 3.38 with a verbal interpretation of often. This means that the employees observed that the resort-hotel often disposes and manages its solid waste such as biodegradable, non-biodegradable, recyclable and special waste. The resort hotel should handle and treat their solid waste properly so as to maintain the cleanliness in the resort-hotel and lessen the environmental impact. Nowadays, solid waste is a serious challenge in any industry. It has many negative impacts to the society and the environment. It is the mere reason why any tourism sector especially the accommodation needs to treat their solid waste properly. For this to happen, practices and different solid waste frameworks should be done effectively.

According to Erich Lawson [5], waste management in hotels is one of the most important issues and does not end up being treated properly. It is mandatory for

hotel industries to develop a comprehensive framework that helps optimize every waste material in the industry as well as reduce the impact on the environment.

Table 1. Solid Waste Management Practices of Resort Hotel as Observed by the Employees in terms of Solid Waste Type

Solid Waste Type	WM	VI	Rank
Biodegradable			
1. Food waste/leftovers	3.73	Always	2
2. Dirty/wet paper	3.71	Always	3
3. Tissue paper	3.81	Always	1
4. Paper cups	3.37	Often	4
Composite Mean	3.66	Always	
Non- Biodegradable			
1. Pens (i.e. ballpens, marker, pens, pencils)	3.20	Often	4
2. Candy/ snack/plastic wrappers	3.56	Always	1
3. Plastic utensils	3.34	Often	2
4. Plastic bags	3.33	Often	3
Composite Mean	3.36	Often	
Recyclable			
1. Mineral water bottles	3.56	Always	1
2. Soda cans/glass bottle	3.43	Often	2.5
3. Newspaper/used papers/carton boxes	3.43	Often	2.5
Composite Mean	3.47	Often	
Special Waste			
1. Empty ink cartridges/ Bottles	3.07	Often	1
2. Used batteries (cellphone, button cell)	2.99	Often	2
Composite Mean	3.03	Often	
Overall Composite Mean	3.38	Often	

Table 2 presents the observation of the employees on the methods of disposal. It was noticed from the composite mean of 3.16 that the hotel often practiced methods of disposal where recycling ranked first with a mean score of 3.41, it was followed by reusing of materials (3.31) and sold as scrap (3.21). This means that it is a priority of the resort hotel to recycle their waste and reuse materials that may lead them to save and lessen their expenses.

Also, the employees know the importance of recycling. Recycling may help save the environment and minimize different pollutions. Recycling is the most perceived and practicable of all options for waste management. By separating reusable products from the rest of the municipal waste stream, it returns raw materials to market. The advantage of recycling is many: it saves valuable finite resources and reduces the

need for virgin materials mining, which reduces the environmental impact of mining and processing [6].

Table 2. Solid Waste Management Practices of Resort Hotel as Observed by the Employees in terms of Methods of Disposal

Methods of Disposal	Weighted Mean	Verbal Interpretation	Rank
1. Recycling	3.41	Often	1
2. Reusing of materials	3.31	Often	2
3. Donation purposes	3.01	Often	4
4. Shredding	2.88	Often	5
5. Sold as crap	3.21	Often	3
Composite Mean	3.16	Often	

However, donation purposes and shredding rated the least with mean values of 3.01 and 2.88 respectively. It is observed that the resort-hotel does not focus on donation purposes and shredding it may be because instead of shredding and donating they are selling, recycling or reusing the wastes that they obtain in their operation.

Table 3. Solid Waste Management Practices in terms of Disposal Practices

Disposal Practices	WM	VI	Rank
1. Waste bins around the resort hotel is enough and well-located	3.74	Strongly Agree	2
2. Waste bins are properly labelled (Biodegradable and Non-biodegradable)	3.69	Strongly Agree	3
3. Wastes are collected every day and are always emptied	3.75	Strongly Agree	1
4. Hotel has an available Material Recovery Facility	3.55	Strongly Agree	5.5
5. Strict implementation of 7s (Sort, set in order, shine, standardize, safety, security and sustain)	3.61	Strongly Agree	4
6. Well dissemination of information about waste disposal through seminar (once a year) and memorandum	3.55	Strongly Agree	5.5
Composite Mean	3.65	Strongly Agree	

Table 3 shows the observation of the employees on the different disposal practices. It was noticed from the composite mean of 3.65 that the employees strongly

agree that resort-hotels have proper disposal practices. The item “wastes are collected every day and are always emptied got the highest mean of 3.75 followed by “waste bins around the resort hotel is enough and well located” (3.74) and the item “waste bins are properly labelled (biodegradable and non-biodegradable)” (3.69). The resort-hotels have their own way on how to implement the different disposal practices. Every day, trash bins are emptied and disposed which will not result to any health detrimental problems. Also, there are numerous trash bins located in conspicuous areas where the guests can easily dispose their trash. This just means that the resort-hotels are already practicing the proper disposal techniques.

In the study of Delfin [7], recycling is a processing technique used so items can also be used again. In recycling, the same materials are used and over again to make the same or equivalent product. There are four steps to a successful recycling program. Collecting is a process of collecting waste and garbage. Sorting is separating the biodegradables from non-biodegradable, plastic from paper and grouping objects according to their own kind. Reclaiming is a process to obtain from a waste product or by-product. And reusing it is a process of using something over and over.

Table 4 presents the summary of the solid waste management practices of the resort-hotel as observed by the employees which attained a composite mean of 3.39 and a verbal interpretation of often. This only implies that the employees agreed that the resort-hotel implements solid waste management and adapts different methods of disposal and disposal practices. It is essential for the attainment of the objectives of solid waste management of the resort-hotel. Disposal practices got the mean of 3.65 followed by solid waste type with 3.38 and methods of disposal with 3.17.

Table 4. Solid Waste Management Practices of Resort Hotel as Observed by the Employees

Solid Waste Management	CM	VI	Rank
1. Solid waste type	3.38	Often	2
2. Methods of disposal	3.16	Often	3
3. Disposal practices	3.65	Always	1
Composite Mean	3.39	Often	

CM – Composite Mean; VI – Verbal Interpretation

Effective solid waste management has developed and improved different methods in order to minimize problems regarding wastes. In order to accomplish this

purpose, laws, and ordinances are being implemented to prevent these occurring problems. Necessary steps have been taken to solve this widespread problem and setting up a Material Recovery Facility (MRF) in each barangay is one step. The Material Recovery Facility focuses on segregation of solid wastes which are later recycled in order to lessen the high volume of recyclable and reusable materials in dump site [8].

Table 5 presents the assessment of employees, tourists and over-all assessment on the management of sustainable resort-hotel in CALABARZON as to preservation which attained a composite mean of 3.65, 3.51 and 3.58 respectively with a verbal interpretation of strongly agree.

This means that the respondents strongly agree that preservation helps in managing sustainable resort hotel.

The researcher observed that preservation is one of the many ways that any establishment can use to protect the environment and secure the needs in natural resources of the future generation. It is also one of the methods in which a resort-hotel will be sustainable. It is a fact that if there is no environment, tourism will be nothing. Tourism depends on the environment if the environment is damaged, it will not be beneficial to tourist/guests, to the host community and even to the whole country. For the future generation to experience what people experiencing now, they must put efforts to preserve the natural resources. It is recognized that tourism must protect and preserve the environment and natural attractions so that people are able to travel and set limits for use in order to make sites truly sustainable [9].

Table 5. Managing Sustainable Resort- Hotel as to Preservation

Preservation	Employees			Guests			Overall		
	WM	VI	R	WM	VI	R	WM	VI	R
1.Implements programs/projects for proper waste management.	3.69	SA	3	3.57	SA	1.5	3.63	SA	1
2. Helps the local residents to be aware in taking care of the natural environment, participates in the nature conservation programs like reforestation and campaigns against illegal practices.	3.60	SA	5	3.57	SA	1.5	3.53	SA	4.5
3. Follows the standard rules and regulations in maintaining and protecting their area.	3.72	SA	1	3.52	SA	3	3.62	SA	2
4. Complies with reforestation and clean and green program to preserve the natural environment.	3.68	SA	4	3.48	A	5	3.58	SA	4.5
5. Advocates non-disturbance of the wild and the maintenance of its green surroundings.	3.54	SA	6	3.41	A	6	3.48	A	6
6. Strictly prohibits illegal practices like cutting of trees and poaching of endangered animals.	3.71	SA	2	3.49	A	4	3.60	SA	3
Composite Mean	3.65	SA		3.51	SA		3.58	SA	

Table 6. Managing Sustainable Resort- Hotel in CALABARZON as to Conservation

Conservation	Employees			Guests			Overall		
	WM	VI	R	WM	VI	R	WM	VI	R
1. Installs energy saving technologies and implements recycling to conserve the environment.	3.48	A	5	3.42	A	2.5	3.45	A	4
2. Takes part in nature conservation programs like tree planting and starts campaigns against illegal practices.	3.59	SA	2	3.36	SA	5	3.48	A	3
3. Has different water and energy conservation techniques.	3.51	SA	4	3.35	A	6	3.43	A	5
4. Conserves natural resources by limiting its use.	3.55	SA	3	3.42	A	2.5	3.49	A	2
5. Initiates clean up drives in coastal areas.	3.38	A	6	3.37	A	4	3.38	A	6
6. Implements measures (e.g. one guest one towel and toiletries, when air condition and appliances are not in use it should be turned off) in the usage of their facilities and amenities.	3.74	SA	1	3.55	SA	1	3.64	SA	1
Composite Mean	3.55	SA		3.41	A		3.48	A	

It can be gleaned from table 6 the assessment of employees and tourist. The over-all assessment on the management of sustainable resort-hotel in CALABARZON as to conservation which attained a composite mean of 3.55, 3.41 and 3.48 respectively with a verbal interpretation of strongly agree. This means that the respondents strongly agree that conservation has its take in managing sustainable resort hotel. The researcher observed that guests and employees are careful in assessing conservation practices. For them, their involvement and welfare as well as the local residents' is important. They are very eager in making their little ways in conserving the environment to maintain its quality and to avoid its degradation. When conservation is practiced, it benefits not just the tourist or the establishment itself but it is more beneficial to the local residents. When a certain destination is conserved, tourist or guest arrival increases, earnings of the local residents also increase, locals are given job opportunity and the natural resources are not diminished.

Hospitality industry benefits the local residents in number of ways. The first benefit is that the results of conservation and preservation can be enjoyed by the local community as well as by tourists. Moreover, in many countries, nature is the major source of tourism products. Areas such as mountains, caves and coral Reefs are appreciated both by domestic and foreign visitors. Many governments and tourist services operators realize in order to continually benefit from tourism, the quality

of the natural areas that tourists visit should be maintained by protecting the sites from unwanted impacts and degradation.

Table 7 shows the assessment of employees, tourist and over-all assessment on the management of sustainable resort-hotel in CALABARZON as to monitoring which attained a composite mean of 3.56, 3.44 and 3.50 respectively with a verbal interpretation of strongly agree and agree. This means that the respondents strongly agree that monitoring is a factor in managing sustainable resort hotel. The guests as well as the employees know that for every plan to be successful there should be a monitoring process to assess if a plan is beneficial or not. In hospitality and tourism, planning is very essential, therefore, monitoring should be done properly to assess the risks and to put forth efforts to maintain and improve the plan. To assess the success of an environmental plan or solid waste management, a thorough monitoring should be done. In this monitoring, the essentials and lapses can be assessed and the proper solution may be formulated. Monitoring progress is seen as an integral part of the overall planning and management of destinations and as an integral part of efforts to promote sustainable development for the tourism sector at all levels.

The stimulus for the tourism sector stems from the perception that many destinations were at risk due to insufficient attention to tourism impacts and long-term destination sustainability.

Table 7. Managing Sustainable Resort- Hotel in CALABARZON as to Monitoring Process

Monitoring Process	Employees			Guests			Overall		
	WM	VI	R	WM	VI	R	WM	VI	R
1. Monitors progress in preservation through evaluation on the local residents' and guests' observation.	3.57	SA	2	3.47	A	2	3.52	SA	2
2. Evaluates the status of the surrounding environment on a weekly basis.	3.54	SA	4	3.44	A	4	3.49	A	4
3. Makes a written report after every clean-up drive/ coastal clean-up.	3.50	SA	6	3.39	A	6	3.44	A	6
4. Observes and maintains the cleanliness every day.	3.69	SA	1	3.49	A	1	3.59	SA	1
5. Evaluates every campaign or projects regarding conservation and preservation.	3.53	SA	5	3.41	A	5	3.47	A	5
6. Guests follows the implemented policies.	3.55	SA	3	3.45	A	3	3.50	SA	3
Composite Mean	3.56	SA		3.44	A		3.50	A	

Table 8. Managing Sustainable Resort- Hotel in CALABARZON as to Rules and Regulations

Rules and Regulations	Employees			Guests			Overall		
	WM	VI	R	WM	VI	R	WM	VI	R
1. The resort-hotel strictly follows the Philippine Ecological Solid Waste Management Act of 2000.	3.69	SA	3	3.51	SA	1	3.60	SA	2
2. Implementing Rules and Regulations of Philippine Ecological Solid Waste Management Act of 2000 The resort hotel: Utilizes environmentally-sound methods that maximize the utilization of valuable resources and encourage resources conservation and recovery;	3.68	SA	5	3.49	A	2	3.58	SA	3.5
3. Sets guidelines and targets for solid waste avoidance and volume reduction through source reduction and waste minimization measures, including composting, recycling, re-use, recovery, green charcoal process, and others, before collection, treatment and disposal in appropriate and environmentally-sound solid waste management facilities in accordance with ecologically sustainable development principles;	3.68	SA	5	3.44	A	3.5	3.56	SA	5
4. Ensures the proper segregation, collection, transport, storage, treatment and disposal of solid waste through the formulation and adoption of the best environmental practices in ecological waste management excluding incineration.	3.77	SA	1	3.44	A	3.5	3.61	SA	1
5. The resort-hotel's staff discusses the rules and regulations to its guests before their check-in.	3.74	SA	2	3.42	A	5	3.58	SA	3.5
6. Imposes fines and sanctions to violators of its rules and regulations.	3.68	SA	5	3.39	A	6	3.53	SA	6
Composite Mean	3.70	SA		3.45	A		3.58	A	

Table 8 shows the assessment of employees, tourist and over-all assessment on the management of sustainable resort-hotel in CALABARZON as to rules and regulation which attained a composite mean of 3.49, 3.34 and 3.42 respectively with a verbal interpretation of agree. This means that the respondents agree that rules and regulation is a factor in managing sustainable resort hotel. It implies that every establishment need a set of rules and regulation to follow for the success of its operation. When there is a lack of rules and regulations, tourists and guests doubt their security which will lead them to enjoy the comforts of their home and neighborhood rather than risk their self in travelling. Any hospitality and tourism establishment should abide with the rules and regulations set by the government. Moreover, the establishment may set their own rules and regulations that will be beneficial to all stakeholders. Rules and regulation should be followed by all concerned and should be strictly implemented for the smooth operation of the resort-hotel.

A tourist attraction is an interesting place for tourists to visit, typically because of its inherent or exhibited natural or cultural value, its historical significance, its natural or built beauty, its leisure, adventure, fun and

medical services for aging travelers. Consequently, lack of rules and regulations in public places, hotels and travel centers causes people to prefer to remain in the security of their neighborhood and home. Areas may acquire the reputation of being dangerous and thus, become less desirable travel destinations as what has happened in the Philippines, the Caribbean and parts of Mexico, Spain and Italy, where there has been a sharp increase in the number of thefts, robberies, shootings and assaults among the local people. Tourists will never go to destinations which they considered [10].

Table 9 shows the assessment of employees, tourist and over-all assessment on the management of sustainable resort-hotel in CALABARZON as to environmental knowledge which attained a composite mean of 3.49, 3.34 and 3.42 respectively with a verbal interpretation of agree. This means that the respondents agree that environmental knowledge is a factor to a better understanding of the environment and its protection.

A deeper and wider environmental knowledge is encouraged and will only materialize if there will be seminars, awareness campaign, and information dissemination.

Table 9. Managing Sustainable Resort- Hotel in CALABARZON as to Environmental Knowledge

Environmental Knowledge	Employees			Guests			Overall		
	WM	VI	R	WM	VI	R	WM	VI	R
1. Has enough environmental knowledge when it comes to the benefits of a proper solid waste management.	3.64	SA	2	3.51	SA	2	3.57	SA	2
2. Reminds their guests of the do's and don'ts in the resort hotel's environment.	3.70	SA	1	3.48	A	3	3.59	SA	1
3. There are few signage/signboards like No Smoking and No littering in the resort hotel's premises.	3.58	SA	3	3.19	A	5	3.39	A	4.5
4. Often conducts seminars about environmental knowledge.	3.45	A	5	3.33	A	4	3.39	A	4.5
5. Facilities don't conform to the proper environmental care.	3.10	A	6	2.98	A	6	3.04	A	6
6. Often reminds their guests about proper solid waste management.	3.49	A	4	3.54	SA	1	3.52	SA	3
Composite Mean	3.49	A		3.34	A		3.42	A	

Also, it helps them realize the practices to be done to lessen the impact of their job and different tourist activities to the environment.

According to the National Environmental Policy [11], formal and informal environmental education is vital in order to change the attitude of people and appreciate environmental concerns. Formal education is important for raising awareness, improving extension services, raising awareness about environmental issues and building institutional capacity. Non-formal education of the environment benefits people outside the formal system of education. Public awareness empowers the public on environmental issues to develop a strong sense of responsibility. In terms of the assessment of employees, the item "Reminds their guests of the do's and don'ts in the resort hotel's environment" ranked third with a weighted mean of 3.70. It was followed by the item "Has enough environmental knowledge when it comes to the benefits of a proper solid waste management".

It can be gleaned from the table 10, the assessment of employees, tourist and over-all assessment on the management of sustainable resort-hotel as to sanitation

which attained a composite mean of 3.74, 3.48 and 3.61 respectively and with a verbal interpretation of strongly agree and agree. This means that the respondents agree that sanitation is a concern that needs attention for the management of sustainable resort-hotel.

Whenever a tourist or guests visit a place, it is their primary concern to be in good health condition and to avoid any harm or illness that they can get in the tourist destination that is why they are cautious. No tourist/guest wants to put their health at stake. And it is the primary concern of the establishment as well. They implement solid waste management, follow different standard and guidelines in maintaining the cleanliness of the place and in preparing food to be served to guests to avoid or minimize health risks.

In order to promote good health, Okonkwo [12] defines sanitation as the hygienic means to prevent human harm from contact with multiple hazards associated with waste. Some hazards include microbiological and chemical physical, biological and chemical hazards. From human and animal feces, domestic waste water, solid waste, industrial and agricultural waste, the most common hazards posing health problems..

Table 10. Managing Sustainable Resort- Hotel in CALABARZON as to Sanitation

Sanitation	Employees			Guests			Overall		
	CM	VI	R	CM	VI	R	WM	VI	R
1. Preservation	3.79	SA	1	3.51	SA	1.5	3.65	SA	1
2. Solid waste is placed in appropriate container that is acceptable to collectors	3.75	SA	2	3.47	A	4	3.61	SA	3
3. Papers, plastics, glass, metals and cans are properly segregated.	3.74	SA	3.5	3.51	SA	1.5	3.63	SA	2
4. Collection of solid waste is done in a manner that prevents damage to the container and spillage or scattering of solid waste within the collection vicinity	3.74	SA	3.5	3.44	A	5	3.59	SA	4
5. Tree trimmings are secured in bundles and placed in a container.	3.67	SA	5	3.48	A	3	3.58	SA	5
Composite Mean	3.74	SA		3.48	A		3.61	SA	

CONCLUSION AND RECOMMENDATION

There is a high level of employees' assessment of solid waste management practices of resort-hotel in terms of segregation of solid waste type, methods of disposal and disposal practices. In addition, the employees and guests strongly agreed that preservation, monitoring progress, rules and regulations and sanitation are practices in managing sustainable resort-hotel and agreed in conservation and environmental knowledge. Employees at the back of the house have a higher observation on the solid waste management practices in terms of biodegradable, special waste, methods of disposal and disposal practices. Employees have significantly higher response on management sustainable resort hotel in terms of preservation, rules and regulation, environmental knowledge and sanitation. There is a significant relationship on the assessment of the respondents to solid waste management practices and managing sustainable resort-hotel in the observation of the employees. For the recommendation, the resort-hotel may initiate clean and green programs to preserve the natural environment and may help the local residents on environmental awareness and nature conservation. Clean-up drives in coastal area may be initiated by the resort-hotel that may be participated by the local residents and the employees.

Information materials about solid waste management may be made available to tourist in order for them to be reminded of the do's and don'ts in the resort hotel's environment and to inculcate environmental knowledge. Also, the resort-hotel may conform to the proper environmental care by adapting energy and water conservation techniques, posting of different signage like No Smoking and No littering and adding properly labelled waste containers. And the resort hotel may conduct a 5-10-minute orientation to its guest upon arrival about the practices of the resort regarding solid waste management and the corresponding fines and sanctions if the rules and regulations of the hotel are violated.

Proposed Environmental Sustainability Plan for Resort Hotels in CALABARZON

A proposed environmental sustainability plan for resort hotels in CALABARZON was created in order to encourage the management of resort-hotel to adapt sustainable practices for the protection of the environment. This plan provides the mechanism for the implementation of the Environmental Sustainability Policy for the Resort Hotels in CALABARZON and aims to identify environmental issues and set priorities,

set overarching environmental objectives, establish environmental targets and key performance indicators, and allocate responsibility and time frames for action.

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