



Received: 27-10-2025  
Accepted: 07-12-2025

## International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

### Assessment of Solid Waste Management Practices in Accommodation Establishments in Cabanatuan City, Nueva Ecija

Camacho Carlo Jose L

Graduate School, Wesleyan University - Philippines, Cabanatuan City, Nueva Ecija, Philippines

DOI: <https://doi.org/10.62225/2583049X.2025.5.6.5376>

Corresponding Author: Camacho Carlo Jose L

#### Abstract

This study assessed the implementation of Republic Act No. 9003 (Ecological Solid Waste Management Act of 2000) in accommodation establishments in Cabanatuan City, Nueva Ecija. Using a quantitative descriptive-comparative design, data were gathered from 140 respondents (35 supervisors and 105 employees) through structured questionnaires. Descriptive statistics and independent-samples t-tests were applied to analyze business profiles, employees' perceptions, participation in the 3Rs and composting, and challenges in solid waste management. Findings showed that establishments comply with visible practices such as

segregation and collection, yet weaknesses remain in composting, resource recovery, and employee awareness. Supervisors consistently rated implementation higher than employees, with significant differences in environmental protection, systematic handling, awareness, recycling, and composting. Guest non-cooperation emerged as the most pressing challenge. A proposed Solid Waste Management Plan emphasizes waste reduction, staff training, recycling linkages, and composting systems. The study underscores the importance of aligning policy with practice and engaging both employees and guests.

**Keywords:** Accommodation Establishments, Composting Practices, Employee Perceptions, Republic Act 9003, Solid Waste Management, Three Rs (3Rs)

#### Introduction

Solid Waste Management (SWM) continues to be a pressing concern in secondary cities like Cabanatuan City, Nueva Ecija, where the expansion of accommodation establishments such as hotels, inns, motels, and resort-hotels has intensified environmental pressures. These establishments generate significant volumes of waste, including plastics, food waste, and other non-biodegradables. While international data estimate hotel waste generation at 0.89-2.5 kg per guest per day (Suffian *et al.*, 2018), the absence of localized data makes it difficult to tailor interventions to the realities of inland, mid-sized Philippine cities. In a waste characterization report conducted for the Manila Bay Rehabilitation Project, it was estimated that Cabanatuan City produces approximately 0.4 kg of solid waste per capita daily, which is higher than nearby cities such as San Jose (Benito and Gutierrez, 2024).

The Philippine government enacted Republic Act No. 9003, or the Ecological Solid Waste Management Act of 2000, to address the growing waste crisis. This law mandates local government units and private institutions to implement waste segregation, composting, recycling, and the use of Material Recovery Facilities (MRFs). However, most existing compliance data focuses on LGU-level implementation. The Philippine Statistics Authority (2020) reported that about 95% of the waste from tourism-related sectors comes from accommodation and food services, but the report lacks detail on the operational practices within individual establishments. Furthermore, local LGU monitoring reports show that although barangays such as Sangitan in Cabanatuan City have an 86.38% waste segregation compliance rate, waste diversion targets are still not achieved due to procedural gaps and limited private sector integration (Manila Bayanihan Project, 2023).

Current academic literature also reveals significant gaps. Most empirical studies on SWM in the Philippines focus on coastal tourism hotspots like Boracay or urban hubs such as Cebu (UNEP, 2021). In contrast, very few studies examine how inland and mid-sized cities like Cabanatuan translate the mandates of RA 9003 into everyday operations, particularly in privately owned accommodation establishments. Previous studies in Nueva Ecija have also observed that while some establishments comply with composting and segregation, many lack infrastructure, trained personnel, or managerial oversight to enforce these practices effectively (De Jesus and Velasquez, 2023) [3]. There is also a shortage of employee-level insights, such as how

workers perceive RA 9003 implementation, whether they participate in recycling or composting, and the challenges they face in following environmental procedures.

Given these observed gaps in both scholarly literature and local implementation reports, this study is anchored on the need to generate localized, behavior-based, and establishment-level data on solid waste practices. Specifically, the study seeks to explore how RA 9003 is being implemented inside accommodation establishments in Cabanatuan City by examining the practices, perceptions, and participation levels of employees directly involved in waste handling. Through this, the research aims to generate actionable insights for a practical and context-sensitive Solid Waste Management Plan, while contributing empirical evidence that supports both local and national policy improvement.

### Statement of the Problem

This study on *“Assessment of Solid Waste Management Practices in Accommodation Establishments in Cabanatuan City, Nueva Ecija”* sought to examine how solid waste practices are implemented within hospitality operations.

To enable comparative analysis, the study considers the classification of respondents based on their job roles and length of service. However, only the job roles such as housekeeping staff, kitchen staff, utility personnel, and immediate supervisors served as the basis for testing significant differences in perceptions, participation, and challenges related to waste management practices.

### Specifically, the study aimed to address the following questions:

1. What are employees' perceptions of the effectiveness of RA 9003 in their accommodation establishment?
2. What is the extent of employees' participation in the 3Rs and composting practices as mandated by RA 9003?
3. What challenges do employees face in implementing solid waste management practices within their establishment?
4. Is there a significant difference in the assessment of supervisors and employees regarding their perceptions of the effectiveness of RA 9003 implementation when classified according to respondent type?
5. Is there a significant difference in the participation of supervisors and employees in the 3Rs and composting practices as mandated by RA 9003?
6. Is there a significant difference in the challenges faced by supervisors and employees in implementing solid waste management practices within their establishments?
7. What Solid Waste Management Plan may be proposed for accommodation establishments based on the findings of the study?

### Materials and Method

This study used a quantitative research method, which is well-suited for social and environmental issues, using data that can be measured and statistically analyzed. This method is known for producing objective results, reducing researcher bias, and making it easier to investigate large datasets in a systematic way (Apuke, 2017).

To complement the quantitative approach, the study used a descriptive-comparative research design. This study

followed a clear framework to look into how Republic Act No. 9003 was put into action. This included looking at employee perception, their involvement in practices related to the 3Rs (reduce, reuse, recycle) and composting, the business profile of the establishments, and the practical challenges faced by employees in day-to-day waste management tasks. This design is often used in hospitality-related environmental research, especially when the goal is to document current conditions rather than to look into the reasons behind them.

The study employed the survey method, a popular technique in quantitative research, to gather data. Employees working in environmental compliance and waste management will be given a structured questionnaire. For instance, although Esteban (2010) <sup>[4]</sup> focused on higher education institutions, this study turns its attention to private accommodation establishments, an area in the Philippine hospitality industry that has not received enough attention.

The questionnaire was structured around four core variables identified in the Statement of the Problem: (1) the business profile of the establishment, (2) employee perceptions of how RA 9003 is being implemented, (3) their participation in the 3Rs and composting efforts, and (4) the challenges they encounter in managing solid waste. Responses were measured using a four-point Likert scale, allowing the researcher to capture both the frequency and intensity of practices and challenges.

Data analysis used descriptive and inferential statistics. Frequency, percentage, weighted mean, standard deviation, and ranking are applied to summarize data and identify trends. Comparatively, the independent-samples t-test assessed statistically significant differences between the two responder groups.

In summary, the study used a quantitative method and a descriptive-comparative design to present a full, evidence-based picture of how accommodations establishments in Cabanatuan City currently deal with solid waste. The results aimed to support building a Solid Waste Management Plan that not only follows the rules of RA 9003, but also takes into account the difficulties and working circumstances that local hospitality businesses face every day.

### Research Locale and Sampling Procedure

The study was carried out in Cabanatuan City, Nueva Ecija, a key urban center in Central Luzon, Philippines. The city's growth and tourism business have increased hotel, inn, motel, and resort-hotel enterprises. These enterprises improve the local hospitality sector and were chosen to test the Republic Act No. 9003 solid waste management (SWM) practices. The city's diverse business types and operating configurations made waste management and its issues easy to observe.

Purposive sampling, a non-random method, was used to select individuals who had relevant knowledge or expertise. This study included all 35 registered accommodation establishments in Cabanatuan City, ensuring demographic representation. Employees in each establishment were chosen for waste management tasks. Housekeeping staff, kitchen staff, utility personnel, and their immediate supervisor were included. Collaboration was initiated with the management of each enterprise to identify qualified respondents, ensuring that participants fulfilled the inclusion criteria. This ensured that the data included policy-level and practical RA 9003 compliance experiences.

Their operational roles and first-hand exposure to waste management routines made them ideal sources of data regarding the implementation and challenges of SWM at the establishment level. Administrative staff and new hires (less than six months of tenure) were excluded to maintain focus on routine and sustained waste practices.

A total of 35 registered accommodation establishments took part in the survey. Every establishment supplied a respondent for each critical operational position: one member from housekeeping, one from the kitchen staff, one from utilities, and one supervisor. This approach led to a total of 105 employee respondents and 35 supervisors, bringing the overall number of participants to 140.

Data collection was conducted through the face-to-face administration of structured survey questionnaires. This approach facilitated immediate clarification of questions, ensured proper understanding of each item, and guaranteed that only qualified individuals participated. The combination of a city-wide establishment sample and carefully selected respondent profiles ensured that the data reflects grounded, experience-based insights. This comprehensive sampling method supported the study's objective of informing a localized and practical Solid Waste Management Plan that is both compliant with national policy and tailored to the operational realities of Cabanatuan City's hospitality sector.

**Table 1:** The table shows the four-point Likert scale and verbal equivalents used to assess employees' perception of RA 9003 implementation

Numerical Rating	Range	Verbal Interpretation	Qualitative Description
4	3.25 – 4.00	Always	Fully implemented
3	2.50 – 3.24	Often	Mostly implemented
2	1.75 – 2.49	Seldom	Occasionally practiced
1	1.00 – 1.74	Never	Not implemented

**Table 2:** The table shows the Likert scale used to assess employee 3Rs and composting participation

Numerical Rating	Range	Verbal Interpretation	Qualitative Description
4	3.25 – 4.00	Always	The practice is consistently done
3	2.50 – 3.24	Often	The practice is done most of the time
2	1.75 – 2.49	Seldom	The practice is done occasionally
1	1.00 – 1.74	Never	The practice is not done at all

**Table 3:** The table summarizes the solid waste management challenge severity response scale

Numerical Rating	Range	Verbal Interpretation	Qualitative Description
1	1.00 – 1.74	Never	Major challenge
2	1.75 – 2.49	Seldom	Moderate challenge
3	2.50 – 3.24	Often	Minor challenge
4	3.25 – 4.00	Always	No challenge

## Results and Discussions

### 1. What are employees' perceptions of the effectiveness of RA 9003 in their accommodation establishment?

Based on the data, accommodation establishments show strong compliance with visible aspects of RA 9003, such as proper labeling and the use of designated containers. However, the consistency of segregation and monitoring practices is less reliable. Literature highlights that the long-term success of waste management compliance relies not only on structural supports but also on consistent monitoring and reinforcement of daily practices.

### 2. What is the extent of employees' participation in the 3Rs and composting practices as mandated by RA 9003?

The data indicate that accommodation establishments are able to implement the initial steps of composting, such as segregation and site designation. However, they face challenges in consistently applying direct composting activities. Literature suggests that successful composting requires not only awareness but also investments in proper facilities, employee training, and sanitation systems.

### 3. What challenges do employees face in implementing solid waste management practices within their establishment?

The data indicate that while both employees and supervisors acknowledge challenges, these are not frequently

encountered. Guest compliance stands out as the most significant and recurring issue, while internal systems, such as communication and departmental coordination, are seen as less problematic. However, resource limitations, such as inadequate waste handling equipment, limited composting areas, and inconsistent collection schedules, may hinder the consistent enforcement of waste management policies. Addressing these constraints through budget allocation, facility upgrades, and collaboration with local government waste collection systems can improve operational efficiency. These findings align with the study's objectives by identifying external behavioral and resource-related challenges, emphasizing the need for strategic policy and operational interventions. Strengthening guest education, improving resource support, and formalizing enforcement mechanisms can collectively enhance compliance and promote the long-term sustainability of solid waste management practices in accommodation establishments.

### 4. Is there a significant difference in the assessment of supervisors and employees regarding their perceptions of the effectiveness of RA 9003 implementation when classified according to respondent type?

	Resp	Ranks	Mean Rank	U Static	P Value	Decision	VD
		N					
<b>Environment and Public Health Protection</b>	Supervisors	35	86.03	1294	0.008	Reject	Significant
	Employees	105	65.32				
	<b>Total</b>	<b>140</b>					
<b>Eco-Friendly Resource Conservation</b>	Supervisors	35	80.23	1497	0.096	Accept	Not Significant
	Employees	105	67.26				
	<b>Total</b>	<b>140</b>					
<b>Waste Reduction Policies and Measures</b>	Supervisors	35	75.56	1660.5	0.385	Accept	Not Significant
	Employees	105	68.81				
	<b>Total</b>	<b>140</b>					
<b>Systematic Waste Handling Practices</b>	Supervisors	35	87.3	1249.5	0.004	Reject	Significant
	Employees	105	64.9				
	<b>Total</b>	<b>140</b>					
<b>Employee Awareness of RA 9003</b>	Supervisors	35	86.6	1274	0.006	Reject	Significant
	Employees	105	65.13				
	<b>Total</b>	<b>140</b>					
<b>Compliance with Waste Management Guidelines</b>	Supervisors	35	78.06	1573	0.196	Accept	Not Significant
	Employees	105	67.98				
	<b>Total</b>	<b>140</b>					

\*\*difference is significant at 0.05 level

The data reveal several important insights into the perceptions of supervisors and employees regarding the implementation of RA 9003. Overall, accommodation establishments demonstrate strong compliance with visible aspects of waste management, such as proper labeling and the use of designated containers. However, consistency in segregation and monitoring practices remains less reliable, with supervisors generally having a more positive view of the implementation compared to employees, particularly in areas such as environmental and public health protection, systematic waste handling practices, and employee awareness of RA 9003.

While both supervisors and employees show similar perceptions in areas like eco-friendly resource conservation and waste reduction policies, significant differences were noted in the practical execution of systematic waste handling and employee awareness. Supervisors' higher ratings may stem from their involvement in policy oversight, while employees' lower ratings reflect firsthand experiences with operational challenges and gaps in implementation.

The findings also highlight that challenges related to guest

compliance and resource limitations, such as inadequate waste handling equipment and inconsistent collection schedules, are hindering the consistent enforcement of waste management policies. Addressing these resource constraints through budget allocation, facility upgrades, and collaboration with local government waste collection systems can improve operational efficiency.

In conclusion, while there is an overall recognition of RA 9003's goals and efforts, the disparity between supervisors' and employees' assessments indicates that there is a need for improved communication, training, and engagement at all levels. Strengthening both internal practices and external support systems, as well as enhancing staff participation in waste management practices, will be crucial to improving compliance and ensuring the long-term sustainability of solid waste management in accommodation establishments.

### 5. Is there a significant difference in the participation of supervisors and employees in the 3Rs and composting practices as mandated by RA 9003?

	Resp	Ranks	Mean Rank	U Static	P Value	Decision	VD
		N					
<b>Waste Generation Reduction</b>	Supervisors	35	88.7	1200.5	0.002	Reject	Significant
	Employees	105	64.43				
	<b>Total</b>	<b>140</b>					
<b>Material Reuse</b>	Supervisors	35	77.63	1588	0.225	Accept	Not Significant
	Employees	105	68.12				
	<b>Total</b>	<b>140</b>					
<b>Item Recycling</b>	Supervisors	35	84.74	1339	0.016	Reject	Significant
	Employees	105	65.75				
	<b>Total</b>	<b>140</b>					
<b>Composting Practices</b>	Supervisors	35	82.67	1411.5	0.039	Reject	Significant
	Employees	105	66.44				
	<b>Total</b>	<b>140</b>					

\*\*difference is significant at 0.05 level

The data reveal significant disparities in the perceptions of supervisors and employees regarding the implementation of RA 9003 in accommodation establishments. Supervisors generally rated the implementation of RA 9003 more positively across multiple dimensions, including waste generation reduction, item recycling, composting practices, and employee awareness. These higher ratings may be

attributed to supervisors' focus on administrative oversight and goal-setting. In contrast, employees' lower assessments reflect operational challenges, such as inconsistent waste handling practices, limited recycling and composting facilities, and inadequate monitoring systems.

The findings indicate that while policies related to waste management and sustainability are in place, their practical



implementation often falls short at the operational level. For instance, supervisors' higher ratings in waste generation reduction, recycling, and composting suggest a perception of effectiveness, but employees' experiences reflect barriers like inadequate resources and inconsistent enforcement. This gap highlights the need for better alignment between policy formulation and operational practices.

On the other hand, areas such as eco-friendly resource conservation, material reuse, and compliance with guidelines showed no significant difference in perception between supervisors and employees, suggesting more uniform implementation and understanding in these aspects. The study's results suggest that despite the existence of policies, effective and consistent implementation of RA

9003 requires addressing operational challenges. To bridge the gap between supervisors' perceptions and employees' experiences, improvements in training, resource allocation, and participatory monitoring are necessary. By strengthening these areas, accommodation establishments can ensure that RA 9003 is effectively implemented across all levels, enhancing both policy compliance and operational efficiency in waste management practices.

## 6. Is there a significant difference in the challenges faced by supervisors and employees in implementing solid waste management practices within their establishments?

Challenges		Ranks					
	Resp	N	Mean Rank	U Static	P Value	Decision	VD
	Supervisors	35	55.16	1300.5	0.010	Reject	Significant
	Employees	105	75.61				
	Total	140					

\*\*difference is significant at 0.05 level

The data show a significant difference in the perception of challenges faced in the implementation of RA 9003 between supervisors and employees. Employees reported a higher Mean Rank of 75.61, indicating that they perceive and experience greater challenges compared to supervisors, who had a Mean Rank of 55.16. This significant difference underscores a perceptual gap between management and frontline staff, with employees encountering more direct operational constraints such as inadequate facilities, limited manpower, and inconsistent collection schedules. In contrast, supervisors, focused on oversight and compliance, tend to perceive these challenges as less severe. This disparity highlights the importance of a more

participatory approach to waste management implementation, where management takes into account the operational realities faced by employees.

Addressing these operational challenges requires improvements in budget allocation, infrastructure investment, and targeted staff training. By tackling these gaps, accommodation establishments can ensure more effective implementation of RA 9003 and enhance waste management practices across all levels.

## 7. What Solid Waste Management Plan may be proposed for accommodation establishments based on the findings of the study?

Area for Development	Basis from Findings	Objectives	Program/Activities	Person/Department Involved	Resources Needed	Source of Fund	Time Frame	Expected Results/Outcomes
<b>Waste Generation Reduction</b>	Significant difference: Supervisors (88.7) rated higher than employees (64.43), showing that employees perceive weaker reduction efforts. Employees rated lowest in refillable toiletry dispensers (2.70).	To minimize waste at source by reducing plastics and food waste.	- Replace single-use plastics with refillable dispensers - Implement food portion control - Conduct quarterly waste audits	Management, Procurement Officer, Kitchen Dept.	Refillable dispensers, audit tools, training modules	Establishment operating budget	Short-term (0–6 months): Launch procurement changes, roll out refillable dispensers, and begin food waste monitoring.	- 30% reduction in single-use plastics - 20% reduction in food waste - 90% completion of quarterly audits
<b>Material Reuse</b>	No significant difference: Both supervisors (77.63) and employees (68.12) rated moderately. Highest: repurposing linens/towels (3.06 and 3.04). Lowest: reusing biodegradable bags (2.54 and 2.48).	To strengthen the reuse of materials and reduce dependency on disposables.	- Repurpose linens/towels into cleaning rags - Establish reuse stations - Promote reusable kitchen containers	Housekeeping Dept., Kitchen Staff, Waste Mgmt. Officer	Containers, storage bins, signage, sewing kits	Establishment operating budget	Mid-term (6–12 months): Operationalize reuse stations and integrate reusable containers.	- 100 kg of linens reused annually - 50% reduction in disposable container purchases - 1 reuse station per department
<b>Recycling Systems</b>	Significant difference:	To improve recycling	- Provide color-coded bins-	Waste Mgmt. Officer, LGU	Recycling bins,	Establishment + LGU/private	Short-term (0–6 months):	- 25% waste diversion

	Supervisors (84.74) perceived stronger implementation than employees (65.75). Employees rated lowest in plastic/can recycling and facility linkage (2.52).	compliance and ensure effective resource recovery.	Partner with junkshops/recyclers - Launch “Employee Recycling Rewards”	partners, All Staff	logistics vehicles, and an incentive fund	recyclers	Install bins, set partnerships, and launch a recognition program.	rate in 1 year - 1 bin per 20 rooms - 5 employees recognized quarterly
<b>Composting Practices</b>	Significant difference: Supervisors (82.67) vs. employees (66.44). Employees rated lowest in composting biodegradable discards (2.36).	To establish sustainable composting systems and maximize biodegradable waste utilization.	- Establish composting site - Train staff in vermicomposting - Use compost in landscaping/distribute to farmers	Management, Garden/Maintenance Team, Waste Mgmt. Officer	Compost bins, vermibeds, training materials	Establishment + LGU/DA partnership	Mid-term (6–12 months): Build composting facilities, train staff, and start producing compost.	- 50% of biodegradable waste composted - 20 kg of compost produced monthly - 2 composting trainings/year with 80% attendance
<b>Systematic Waste Handling &amp; Storage</b>	Significant difference: Supervisors (87.3) rated “Fully Implemented,” employees (64.9) rated “Mostly Implemented.” Lowest for employees: proper storage before disposal (2.95).	To ensure proper segregation, handling, and storage of all waste streams.	- Assign Waste Officers per department - Enforce segregation at source - Conduct monthly inspections	Supervisors, Housekeeping, Utility Staff	Segregation bins, PPE, inspection checklist	Establishment budget	Ongoing (0–18 months): Continuous segregation monitoring and inspections.	- 90% segregation compliance rate - 12 inspections annually - Zero leakage cases
<b>Employee Awareness &amp; Training</b>	Significant difference: Supervisors (86.6) vs. employees (65.13). Lowest for employees: awareness of roles under RA 9003 (2.33).	To increase staff knowledge and compliance with RA 9003.	- Quarterly RA 9003 training - Display visual reminders - Peer-to-peer coaching by supervisors	HR/Training Dept., Supervisors	Training manuals, multimedia, posters	Establishment budget	Continuous (0–12 months): Quarterly training, awareness rollout, and knowledge tracking.	- 4 trainings annually - 100% of employees trained - 25% increase in RA 9003 knowledge
<b>Compliance Monitoring</b>	No significant difference: Supervisors (78.06) and employees (67.98) both rated “Mostly Implemented.” Employees noted weak monitoring (3.07).	To sustain compliance monitoring with LGU alignment.	- Develop RA 9003 checklist - Submit monthly reports - Coordinate with LGUs for inspections	Supervisors, Waste Mgmt. Officer, LGU	Monitoring forms, report templates, and the data system	Establishment + LGU	Ongoing (monthly, 0–18 months): Perform monitoring and submit reports.	- 12 reports/year - 85% compliance checklist score - 1 positive LGU feedback annually
<b>Addressing Challenges</b>	Significant difference: Employees (75.61) reported more challenges than supervisors (55.16). Highest: guest cooperation issues (3.27). Lowest: guidelines and coordination (1.56).	To reduce operational barriers, improve coordination, and engage guests.	- Allocate budget for SWM tools - Provide guest info cards - Conduct quarterly coordination meetings	Management, Finance Dept., All Dept. Heads	Budget allocation, printed cards, and meeting logistics	Establishment + CSR/partnership funds	Mid- to Long-term (6–18 months): Secure funds, distribute info cards, and sustain meetings.	- ₱50,000 annual SWM allocation - 100% of rooms with info cards - 4 meetings/year across departments

## Conclusion and Recommendation

### Conclusion

Supervisors and employees both recognized efforts to implement RA 9003, especially in environmental and health protection and compliance with waste management guidelines. However, employees had a lower overall perception, indicating gaps in practical application and awareness. Supervisors rated implementation more positively, suggesting that policies are understood at the managerial level but not fully translated into daily operations. Participation in the 3Rs and composting practices was moderate, with structural compliance present but limited employee involvement in composting and waste reduction. This points to barriers hindering the full realization of sustainable waste practices in line with RA 9003.

Both groups identified guest non-cooperation as the primary challenge, followed by limited resources and inconsistent enforcement. Effective waste management requires not just infrastructure but also behavioral participation and resource allocation.

A significant difference was found in perceptions of RA 9003 implementation, with supervisors consistently rating it higher due to their involvement in policy oversight, while employees' lower ratings reflected operational experiences. This disparity highlights the need for stronger training, supervision, and participatory mechanisms.

The study revealed differences in the 3Rs, with supervisors reporting higher participation levels in waste reduction, recycling, and composting. Employee engagement in sustainability initiatives requires reinforcement through structured programs and motivation strategies.

Employees perceived greater challenges in solid waste management, particularly in resources and guest participation. This emphasizes the need for resource improvement, clear guidelines, and interdepartmental coordination to overcome operational constraints.

A comprehensive Solid Waste Management Plan was proposed, focusing on capacity building, infrastructure improvements, and participatory monitoring. It aims to align perceptions, enhance compliance, and strengthen implementation, making accommodation establishments proactive partners in advancing RA 9003 and promoting environmental stewardship.

### Recommendation

1. Accommodation establishments, through management and HR, may institutionalize joint orientation sessions for supervisors and employees to foster a shared understanding of RA 9003. Supervisors should integrate feedback mechanisms to align managerial policies with frontline experiences, enhancing cooperation. This corresponds to the Employee Awareness and Training component of the Solid Waste Management Plan.
2. Establishment management may introduce incentive-based programs such as "Green Employee Awards" or small monetary rewards to encourage employees to participate in reducing, reusing, recycling, and composting. Supervisors, with the Waste Management Officer, should monitor participation. This supports the Employee Motivation and Participation strategies of the Solid Waste Management Plan.
3. Since guest non-cooperation was a significant challenge, accommodation establishments, with the

DOT and local tourism offices, may implement guest awareness campaigns emphasizing proper waste segregation and reduction through in-room signage, digital cards, or short orientation videos. This aligns with the Public Awareness and Communication Strategy of the Solid Waste Management Plan.

4. Supervisors should act as mentors and trainers by providing short coaching sessions during departmental meetings to reinforce proper waste handling and strengthen understanding of RA 9003. This supports the Capacity-Building and Supervision aspect of the Solid Waste Management Plan.
5. LGUs, with accommodation establishment owners and associations, may establish shared MRFs and clustered composting sites, especially for smaller inns and motels with limited space and resources. This supports the Composting and Infrastructure Development component of the Solid Waste Management Plan.
6. Management should allocate a dedicated annual budget for SWM tools, color-coded bins, and training. Department heads and the Waste Management Officer may conduct quarterly coordination meetings to assess progress and make adjustments. This strengthens the Monitoring and Evaluation framework of the Solid Waste Management Plan.
7. The proposed Solid Waste Management Plan may be formally adopted by accommodation establishments as a guiding framework for policy formulation, training, waste segregation, composting, and partnership building. DENR and LGUs may oversee regulatory alignment, while management, supervisors, and employees ensure execution. Its integration provides a structured, evidence-based approach that unifies all initiatives for sustainable waste management.

### References

1. Benito D. Solid Waste Rehabilitation: Addressing Manila Bay's Pollution Crisis. Studocu, 2024. <https://www.studocu.com/ph/document/university-of-the-east-philippines/environmental-science/m9-solid-waste-rehabilitation-addressing-manila-bays-pollution-crisis/144392297>
2. Dalugdog W. Best Practices in the Implementation and Enforcement of R.A. 9003 (Known as Ecological Solid Waste Management Act of 2000) by the Local Government Units (LGUs) in Calabarzon. Academia Letters, 2021. Doi: <https://doi.org/10.20935/al3382>
3. De Jesus F, Velasques RJ. Waste Management of Selected Registered Resorts in District III of Nueva Ecija, Philippines. Asian J Multidiscip Res Rev, June 26, 2023. <https://ajmrr.thelawbrigade.com/article/waste-management-of-selected-registered-resorts-in-district-iii-of-nueva-ecija-philippines/>
4. Esteban MC. Implementation of Solid Waste Management Program of Selected Higher Education Institutions in Cabanatuan City. Wesleyan Univ-Philippines. Unpublished Doctoral Dissertation, 2010.
5. Etikan I. Comparison of Convenience Sampling and Purposive Sampling. Am J Theor Appl Stat. 2020; 5(1):1. Doi: <https://doi.org/10.11648/j.ajtas.20160501.11>
6. Filimonau V. The Prospects of Waste Management in the Hospitality Sector Post COVID-19. Fac Manag Bournemouth Univ, 2020.

- <https://www.sciencedirect.com/science/article/pii/S0921344920305875>
7. Ihemanma CA, Ekeoma VU, Ejike BU. Mycobacterium tuberculosis among middle-aged individuals attending the T.B Unit in Aba South primary health care center Aba, Abia State Nigeria. *Int J Res Rev.* 2015; 2(12):739-744.
  8. Prasad SS, Gupta PK, Mishra JP. Field studies on compatibility of new insecticides and fungicides against stem borer and leaf blast under semi deep-water rice condition. Vadodara, Galore Knowledge Publication Pvt. Ltd, 2015, p24. Report No: GHI224
  9. Sapuay GP. Resource Recovery through RDF: Current Trends in Solid Waste Management in the Philippines. *Procedia Environ Sci.* 2016; 35:464-473. Doi: <https://doi.org/10.1016/j.proenv.2016.07.030>
  10. Suffian R, Kareem HK, Dhamija JP, Rao A. Analyzing Solid Waste Management Practices for the Hotel Industry. *E3S Web Conf.* 2024; 507:1073. Doi: <https://doi.org/10.1051/e3sconf/202450701073>
  11. Wilson O. Enhancing Operational Efficiency and Guest Satisfaction in Hotel Management: A Strategic Approach. *OTS Can J.* 2025; 4(5):72-81. Doi: <https://doi.org/10.58840/ae2m7f34>
  12. Yadav R, Pathak GS. Young Consumers' Intention towards Buying Green Products in a Developing Nation Extending the Theory of Planned Behavior. *J Clean Prod.* 2016; 135:732-739. <https://www.sciencedirect.com/science/article/pii/S0959652616300000>
  13. Zikmund WG, Babin BJ, Carr JC, Griffin M. *Business Research Methods*. Google Books, n.d. [https://books.google.com.ph/books/about/Business\\_Research\\_Methods.html?id=veM4gQPnWHgC&redir\\_esc=y](https://books.google.com.ph/books/about/Business_Research_Methods.html?id=veM4gQPnWHgC&redir_esc=y)