Reviu Akuntansi, Manajemen, dan Bisnis (RAMBIS)
ISSN: 2797-958X, Vol 6, No 3, 2026, 427-445 https://doi.org/ 10.61401/rambis.v6.n3.p427-445.2026

Integrating Culinary Innovation and Zero-Waste Practices in Hospitality: Case Study of Potato Head Bali

Ni Putu Eka Trisdayanti[1*], I Made Purwa Dana Atmaja[2], Made Hendrayana[3]
Politeknik Pariwisata Bali, Badung, Indonesia[1,2,3]
ekatrisdayanti@ppb.ac.id[1*], purwadanaatmaja@gmail.com[2], hendramade72@gmail.com[3]

Article History
Received on 07 July 2026
1st Revision on 11 July 2026
2nd Revision on 26 August 2026
3rd Revision on 20 September 2026
Accepted on 23 September 2026

Abstract

Purpose: This study examines food-waste prevention, culinary upcycling, source segregation, and material recovery at Potato Head Bali, emphasizing organizational routines and external partnerships.

Research Methodology: A qualitative descriptive approach employed semi-structured interviews with six purposively selected informants, direct observation, and document analysis. Data were analyzed using Miles, Huberman, and Saldaña's interactive model.

Results: Findings reveal integrated practices involving ingredient utilization, culinary upcycling, waste segregation, material processing, staff coordination, and monitoring. Selected by-products are reused in food and beverage production, while other organic waste is processed into compost or animal feed. The internal Waste Centre collaborates with the Community Waste Project and external partners, although unrecoverable waste may still reach landfills.

Conclusions: Circular food management relies on coordinated material handling, culinary capabilities, and organizational routines. Upcycling retains usable by-products within food production, complementing waste prevention and reducing reliance on disposal.

Limitations: This single-property study primarily reflects internal perspectives. Landfill diversion, financial returns, and environmental benefits were not independently quantified, limiting generalizability and performance assessments.

Contributions: The study extends circular economy perspectives by conceptualizing culinary upcycling as an internal value-retention loop connecting segregation, culinary transformation, and menu reintegration. It highlights staff training and coordination as enabling factors and offers an adaptable framework for hospitality waste management.

Keywords: *Circular Economy, Culinary Innovation, Food Waste Management, Sustainable Tourism, Zero Waste*

How to Cite: Trisdayanti, N. P. E., Atmaja, I. M. P. D., & Hendrayana, M. (2026). Integrating Culinary Innovation and Zero-Waste Practices in Hospitality: Case Study of Potato Head Bali. *Reviu Akuntansi, Manajemen, dan Bisnis*, 6(3), 427-445.

1. Introduction

Food waste management is an important operational and environmental challenge in hospitality (Muchingami, Basera, Mashoko, & Bhasopo, 2025). Waste arises across preparation and service, with estimates reaching 1.8 kg per guest per day in particular settings, while mixed waste streams and

seasonal demand complicate management. Global assessments highlight the substantial scale of food loss and waste (Memon, Kutty, & Memon, 2024; Srivastava, Chittiprolu, Jaswal, & Kundu, 2025; Ally, Abdulkadir, Remmen, Hirsbak, Mwevura, Furu, & Salukele, 2024). Its environmental consequences include the loss of resources embedded in food production and greenhouse gas emissions throughout the supply chain, including methane released during organic decomposition in landfills (Aslam, Parray, Aslam, & Aslam, 2024; Memon et al., 2024).

Circular Economy (CE) perspectives provide a basis for examining how hospitality businesses prevent waste and retain material value. Research emphasizes agile management and collaboration in organizing responsible food consumption and production, alongside recovery, reuse, and recycling (Mehrotra, Agarwal, Awan, Walsh, & Yaqub, 2025). Within kitchens, chefs adjust workflows and production practices to prevent avoidable losses, drawing on competencies developed through experience, mentoring, and professional relationships (Filimonau, Sezerel, Ashton, Kubal-Czerwińska, Bhaskara, & Ermolaev, 2024; Sezerel, Kılıcaslan, Filimonau, & Dülger, 2025). These practices connect with broader calls for innovation across food production, resource use, and waste management (Herrero, Thornton, Palmer, Benton, & Bodirsky, 2020).

Community participation extends these activities beyond individual businesses, as illustrated by initiatives that transform used cooking oil into soap (Subri, Ghani, Mastam, Zakaria, Mustafa, Muhammad, & Damanhuri, 2025). Such practices are relevant to Sustainable Development Goal (SDG) 12, particularly target 12.3, which calls for halving global per capita food waste at retail and consumer levels and reducing food losses along production and supply chains by 2030 (Nazibudin, Sabri, & Abd, 2025; Voss, Valle, Tabasso, Forte, & Cravotto, 2024). However, examining operational practices aligned with this target is distinct from demonstrating a measurable contribution to its achievement.

In Bali, existing research has quantified and classified food waste from hotels and restaurants, examined circular bioeconomy preferences, and investigated waste management in other tourism-related settings (Suryawan, Suhardono, Rahman, Phan, & Lee, 2025; Wiratama, & Wijaya, 2024; Sadyasmara, Yuarini, Antares, Satriawan, Wiranatha, & Yoga, 2025). These studies provide contextual knowledge, but their focus differs from explaining how food-waste activities are connected within a hospitality operation. Meanwhile, uneven adoption of sorting, auditing, recycling, and composting complicates implementation across businesses (Chourasia, 2025). Limited staff knowledge and training (Martin-Rios, Ruiz-Molina, Filimonau, & Rogenhofer, 2026), capital requirements, and inadequate infrastructure create further constraints (Sailesh, 2025; Vashishth, Sharma, Agarwal, Gupta, Singh, & Sharma, 2024). Inconsistent data collection and reporting also restrict assessments of waste-management performance (Suryawan et al., 2025; Vashishth et al., 2024).

Against this background, the conceptual issue addressed here concerns the relationship between material recovery and the organizational practices that make recovery possible. Identifying prevention, segregation, processing, and education as separate activities does not sufficiently explain how they operate together. In particular, closer examination is needed of how source segregation preserves usable by-products, how culinary capabilities transform them, and how menu reintegration returns them to food service. This shifts attention from listing waste-management practices toward understanding the connections through which circular value retention is enacted.

Accordingly, this study uses a qualitative descriptive approach to document existing food-waste management practices at Potato Head Bali, with particular attention to culinary upcycling, implementation challenges, and enabling conditions. It addresses three research questions, How are food-waste prevention, source segregation, reuse and processing, and education organized and connected within Potato Head Bali operations?, How does culinary upcycling connect by-product recovery with menu development, and what organizational practices support this connection?, What challenges and enabling conditions shape the implementation and continuity of the system?

The study primarily documents and interprets existing practices rather than developing or testing a new intervention. It synthesizes the qualitative evidence into an analytical framework linking material handling, culinary transformation, and organizational support. The intended conceptual contribution is a context-specific account of culinary upcycling as an internal value-retention loop within circular hospitality. The framework is potentially transferable, subject to adaptation and further investigation, rather than a validated model applicable across hospitality settings. Consistent with its descriptive design, the study does not quantify waste-reduction performance or establish causal effects on progress toward SDG 12.3.

2. Literature Review and Hypotheses Development

2.1 Food Waste in the Hospitality Industry

Research on hospitality food waste highlights the importance of operational context. Seasonal demand and mixed waste streams make waste generation difficult to predict and manage consistently (Sucheran, 2024; Vashishth et al., 2024). Global estimates establish the scale of food loss and waste, while environmental assessments explain its implications for resource depletion and emissions, including methane from landfill decomposition (Aslam et al., 2024). These perspectives are complementary but address different questions: aggregate estimates establish the magnitude of the problem, whereas operational studies help explain where intervention is possible.

For the present analysis, three responses are distinguished. Prevention concerns decisions that avoid generating food waste, such as purchasing, preparation, and portioning adjustments. Recovery concerns retaining value from surplus food or by-products through safe redistribution, culinary reuse, or material processing. Disposal concerns residual materials that leave productive use without a further recovery pathway. This distinction prevents improvements in waste handling from being interpreted automatically as reductions in waste generation. It also directs attention to whether an activity avoids a loss, retains food value, recovers nutrients, or merely changes the destination of discarded material.

2.2 Circular Economy and Zero-Waste Practices

Circular economy research provides a basis for examining resource retention, but different studies emphasize different outcomes. Research addressing circularity in tourism and hospitality highlights reuse, recovery, and recycling, in contrast, research on food and beverage firms connects waste-management practices with resource conservation and organizational outcomes (Udodiugwu, 2024). These perspectives support the relevance of recovery, but they should not be treated as evidence that all recovery activities provide equivalent environmental or operational benefits.

Management-oriented research emphasizes the alignment of technology, agile practices, and collaboration in organizing zero-waste responses. A broader review of hospitality sustainability instead identifies the need to connect environmental, economic, social, and organizational dimensions (Mehrotra et al., 2025; Miati, Ariyanto, Widanaputra, & Putri, 2026). Read together, these studies suggest that circularity should be examined through both the movement of materials and the organizational conditions supporting that movement.

Accordingly, this study uses CE as an analytical lens rather than as a general sustainability label. The analysis asks whether practices prevent avoidable losses, retain materials within food use, recover value through non-food processing, or leave residual disposal unresolved. Source segregation is treated as an enabling activity, not a recovery outcome in itself. Likewise, composting is examined as nutrient recovery rather than food-waste prevention. These distinctions allow the study to consider differences among circular pathways without assuming that diversion from landfill necessarily means less food was wasted

2.3 Culinary Innovation and Learning

Studies of kitchen creativity and professional learning offer related but distinct explanations of waste-management practice. Research on chefs' creativity emphasizes adjustments to workflow, ingredient use, and production processes (Budiman, Sangari, & Lewan, 2025; Sezerel et al., 2025). Research on

competence development explains how such practices emerge through experience, mentoring, family influence, and workplace learning (Filimonau et al., 2024). The first perspective concerns what chefs change, whereas the second explains how their capacity to make those changes develops.

Restaurant service research addresses another operational dimension: the role of frontline personnel in service delivery. Its relevance here is contextual rather than direct evidence of culinary waste reduction. This distinction matters because improvements in service quality cannot, without additional evidence, establish that food waste has declined. Broader food-system research similarly places culinary innovation within a wider set of changes involving production, resource use, diets, and waste management (Herrero et al., 2020). Community initiatives converting used cooking oil into soap demonstrate a different recovery pathway from culinary reuse (Subri et al., 2025). Both activities retain value, but only culinary reuse returns suitable ingredients to food production. In this study, culinary innovation is therefore examined by tracing how a by-product is identified, separated, transformed, and reintegrated into a menu. Whether the material was avoidable, safe for food use, or dependent on additional processing remains analytically important; product novelty alone is not treated as proof of sustainability.

2.4 SDG 12 and Performance

Food-waste initiatives can relate to responsible consumption and production through recovery and community engagement (Subri et al., 2025). However, alignment with SDG 12 should be distinguished from demonstrated progress toward target 12.3, which calls for halving global per-capita food waste at retail and consumer levels and reducing losses along production and supply chains by 2030 (Nazibudin et al., 2025; Voss et al., 2024).

For this study, SDG 12 provides policy context rather than a measured performance outcome. The analysis distinguishes descriptions of activities, informant-reported outcomes, and quantitatively documented results. Evidence that a property segregates waste, develops upcycled products, or operates composting facilities establishes the presence of practices, but does not independently establish the amount of food prevented from becoming waste. Claims about reduction or landfill diversion therefore require separate evidence and clear measurement boundaries.

2.5 Research in Bali

Bali-focused studies address different scales and research purposes. Quantification and classification of hotel and restaurant food waste provide information about the materials potentially available for intervention (Sadyasmara et al., 2025). Research on circular bioeconomy preferences and waste management at religious sites provides complementary perspectives on participation and place-specific management conditions (Suryawan et al., 2025; Wiratama & Wijaya, 2024). Their contribution is not diminished by their different focus, but their findings do not directly explain the internal organization of culinary recovery within a hospitality property.

The present study addresses this difference by examining the connections among operational activities. Rather than asking only what waste exists or which practices are adopted, it considers how segregation makes by-products available, how culinary teams identify further uses, and how responsibilities and partnerships support continued implementation. The intended contribution is therefore a contextual explanation of these relationships, not a claim that Bali lacks research on sustainable waste management.

2.6 Implementation Conditions and Barriers

Research on implementation identifies constraints at different organizational levels. Studies of waste-disposal systems emphasize uneven adoption of treatment and recovery arrangements, whereas educational research focuses on the relationship between knowledge, attitudes, and everyday behavior (Martin-Rios, Ruiz-Molina, Filimonau, & Rogenhofer, 2026; Chourasia, 2025). Financial and infrastructure studies identify the cost and availability of facilities as further constraints (Sailesh,

2025; Vashishth, Sharma, Agarwal, Gupta, Singh, & Sharma, 2024). These explanations should be considered together: equipment does not ensure consistent sorting, while employee awareness cannot create an unavailable recovery outlet.

Measurement presents a separate problem. Inconsistent reporting limits comparisons of waste generation and management performance across settings (Suryawan, Suhardono, Rahman, Phan, & Lee, 2025; Vashishth et al., 2024). Consequently, the analysis distinguishes implementation conditions from outcome evidence. Leadership, training, infrastructure, and monitoring are examined as conditions that may support circular practices, rather than being treated as proof of effectiveness. This also permits consideration of situations in which internal practices operate adequately but downstream recovery remains constrained

2.7 Community Participation and Value

Community-oriented research emphasizes participation, collaboration, and continuity as important dimensions of waste-management initiatives across different settings (Harmayani et al., 2025; Nizar, Munir, Munawar, & Irvan, 2021; Subadra, 2024; Utomo, Pieter, Putra, & Siagian, 2023; Wikurendra, Abdeljawad, & Nagy, 2023). Broader reviews and engineering-oriented studies additionally highlight policy, infrastructure, and technical coordination (Adesoji, Ade-Omowaye, Afolalu, & Sunday, 2024; Arya & Shukla, 2025; Monfared, Marandi, & Sauer, 2025; Qammar et al., 2023). Participation and technical capacity are therefore complementary, but neither should be assumed to substitute for the other.

Culinary methods such as nose-to-tail and root-to-stem cooking illustrate ingredient retention within food production (Semwal, Bairwa, Tripathi, & Chauhan, 2024). Literature connecting circular practices with value creation provides a basis for considering potential economic opportunities, but the existence of a recovered product does not by itself establish profitability or a net environmental benefit (Monfared et al., 2025; Vashishth et al., 2024).

In the present framework, community participation is examined through identifiable functions: receiving suitable surplus food, providing processing routes, exchanging resources, or supporting learning. Educational participation is distinguished from material recovery because attending an activity does not establish that a circular material flow has occurred. This approach makes it possible to assess what partnerships contribute, which actors perform recovery work, and where responsibility moves beyond the property.

Drawing on the preceding literature, this study uses circular economy concepts to distinguish waste prevention, value recovery, and residual disposal. Culinary innovation is examined through the identification, segregation, transformation, and menu reintegration of usable food by-products. Community participation is assessed through its role in redistribution, external processing, resource exchange, and learning. Staff capabilities, coordination, infrastructure, and monitoring are considered enabling conditions rather than evidence of effectiveness. These concepts guide the interpretation of interviews, observations, and documents while allowing patterns outside the initial framework to emerge. The analysis therefore examines how circular practices are connected without assuming that recovery necessarily reduces waste generation or produces measurable environmental benefits.

3. Research Methodology

3.1 Research Design and Setting

This study employed a descriptive qualitative case-study approach to examine food-waste management practices at Potato Head Bali. Fieldwork was conducted from 15 to 17 September 2025. The inquiry focused on operational practices, the use of food by-products in culinary development, and the factors that supported or constrained food-waste management. Qualitative description is appropriate for providing a comprehensive account of a phenomenon while remaining close to participants' accounts and the context in which activities occur (Sandelowski, 2000).

3.2 Informant Selection and Data Collection

The study involved six informants selected purposively based on their involvement in and knowledge of food waste management practices at Potato Head Bali. Five informants were members of the Sustainability team, while one informant represented the Kitchen team. This composition reflected the organizational responsibilities and roles of the individuals most directly involved in the food waste management system. The Sustainability team informants provided insights into the organization's sustainability policies, waste management procedures, coordination, monitoring, and implementation of waste reduction initiatives. The Kitchen team informant was selected based on direct involvement in kitchen operations and knowledge of food preparation practices, ingredient utilization, and the application of food waste prevention and culinary upcycling.

Although the Kitchen team was represented by only one informant, this individual provided an operational perspective on kitchen-level practices, particularly ingredient utilization, by-product processing, and coordination across restaurants and bars. The study did not aim to obtain proportional representation from each department but rather to gather information from individuals whose roles were directly relevant to the research objectives. The purposive selection enabled the researchers to obtain information-rich accounts from participants with relevant knowledge and practical experience (Palinkas et al., 2015). The selection was based on role relevance and practical involvement; formal data saturation was not used as a criterion for determining the sample size.

Data were collected through semi-structured interviews, non-participant observation, and document review. Interviews were conducted in Indonesian, lasted approximately 30–60 minutes, and were supported by audio recordings and written notes. Non-participant observation was conducted for approximately one hour in the kitchen, focusing on the processing of food by-products into culinary products, and one hour in the waste-management area. The observation was intended to provide contextual insights into operational practices and to complement the information obtained from interviews and documents. Given its limited duration, the observation was not intended to capture the full range or frequency of routine waste-management activities over time. Therefore, observations were cross-checked against interview accounts and relevant documents, including waste-management Standard Operating Procedures (SOPs), sustainability reports, and internal reports relevant to the study objectives. This triangulation helped contextualize the reported practices, although it did not constitute continuous monitoring of daily operations.

Semi-structured interviews allow researchers to explore participants' perspectives through guided questions while maintaining flexibility for follow-up questions and further clarification (DeJonckheere & Vaughn, 2019). Document analysis provides a systematic means of examining documentary evidence to contextualize and complement other qualitative data (Bowen, 2009).

3.3 Data Analysis

Data were analyzed using the interactive approach developed, comprising data condensation, data display, and conclusion drawing and verification (Miles et al., 2014). The research team conducted manual coding by reading the interview transcripts, identifying meaningful statements, and assigning initial codes to relevant information. Related codes were then grouped into broader categories and developed into themes aligned with the research objectives. For example, statements concerning the use of surplus egg whites from bakery production to prepare a shoyu-style sauce and the transfer of by-products between kitchen sections were initially coded as "by-product reuse" and "cross-section ingredient utilization." These codes were grouped under the broader category of "food by-product utilization" and contributed to the development of the theme "Food Waste Prevention in Kitchen Preparation and Service." The emerging themes were then examined alongside observation notes and documentary evidence to identify convergences, differences, and contextual explanations. The analysis did not use specialized qualitative-coding software or a formal intercoder-reliability procedure.

3.4 Credibility and Member Checking

Credibility was strengthened through triangulation across interviews, observations, and documents. A summary of the findings was sent to all six informants for member checking, and all six provided responses. Their feedback was considered during the review of the findings. This process was used to check the accuracy and contextual appropriateness of the summary rather than to claim that every interpretation was unanimously endorsed. Methodological triangulation involved cross-checking interview data against direct observations and documentary evidence to develop a more comprehensive understanding of the phenomenon (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014). Member checking was conducted by returning key findings to the informants for verification before finalization, allowing them to assess the accuracy of the interpretations and their consistency with their experiences (Birt, Scott, Cavers, Campbell, & Walter, 2016).

3.5 Research Permission, Consent, and Confidentiality

Permission to conduct the research was obtained from Potato Head, and consent to participate was obtained from the informants before the interviews. Informants' identities were anonymized in the presentation of findings to maintain confidentiality.

4. Results and Discussions

4.1 Results

Interviews with the Sustainability and Kitchen teams indicate that waste management at Potato Head Bali is organized as a circular process. The process begins with efforts to retain the value of food materials in kitchen operations, continues with waste separation and collection, and ends with material-specific processing or the disposal of residual waste. The "Good Times, Do Good" philosophy provides the broader sustainability orientation for these practices. The findings are presented below in four related themes.

4.1.1 An Integrated Waste Management System from the Kitchen to Final Treatment

According to the Sustainability Manager (Informant S1), waste management begins before materials are discarded. Kitchen by-products that remain suitable for food use are considered for further processing into other food or beverage components. Materials that are no longer used for food production are separated according to their characteristics and possible treatment routes. Thus, waste management is not limited to transporting waste away from the property; it involves decisions about the subsequent use or treatment of different material streams.

"The system is not merely about 'taking waste out of the hotel'; rather, it controls the flow of materials from cooking activities through to determining the final destination of each type of waste." (Sustainability Manager, Informant S1; translated from Indonesian)

The informant described several routes for separated materials. Organic kitchen waste that is not reused as food may be directed to composting or, through partners, to animal-feed channels. Recyclable inorganic materials are directed to recycling or upcycling, while materials requiring specialized treatment are transferred to relevant external partners. Only residual materials that cannot be recovered are sent to a landfill. This shows that the system combines on-site activities with external processing arrangements.

Information from Sustainability team informants clarifies the role of the facilities involved. Potato Head has an internal Waste Centre within the property, which is also presented to visitors through the Follow the Waste Tour. Separately, the Community Waste Project is a collective facility in Denpasar that handles waste from several participating businesses through sorting, composting, recycling, and upcycling. Therefore, not all waste generated by Potato Head is necessarily processed exclusively within the hotel's own Waste Centre.

"Potato Head has an internal Waste Centre within the property, which is part of the Follow the Waste Tour. Visitors can see the process of collecting, sorting, and processing materials from the back-of-house operational area." (Sustainability team member, Informant S2; translated from Indonesian)

The informants also described measurement and recording as part of the waste-management cycle. According to the informants, a waste audit was conducted in 2023 in collaboration with Eco Mantra, involving sampling, categorization, and quantitative analysis. Since the researchers did not obtain or independently examine the audit records, this information is presented as an account reported by the informants rather than as documentary evidence. It provides historical context regarding the organization's previous waste-monitoring practices but cannot be used to verify the continuity or performance of these practices during the 2025 fieldwork period. The informants also reported that the Community Waste Project collects daily data to help participating businesses review their waste-management practices. However, the information available for this study did not include a complete set of daily or category-specific waste measurements for the 2025 fieldwork period. Consequently, the findings describe reported monitoring practices rather than independently verified quantitative outcomes.

The findings indicate that waste management at Potato Head involves several interconnected practices, beginning with kitchen operations and waste prevention. Food waste is managed through source segregation, followed by different handling approaches depending on the type and potential use of the materials. These practices connect culinary upcycling with broader organic waste management and external waste management support, as illustrated in Figure 1.

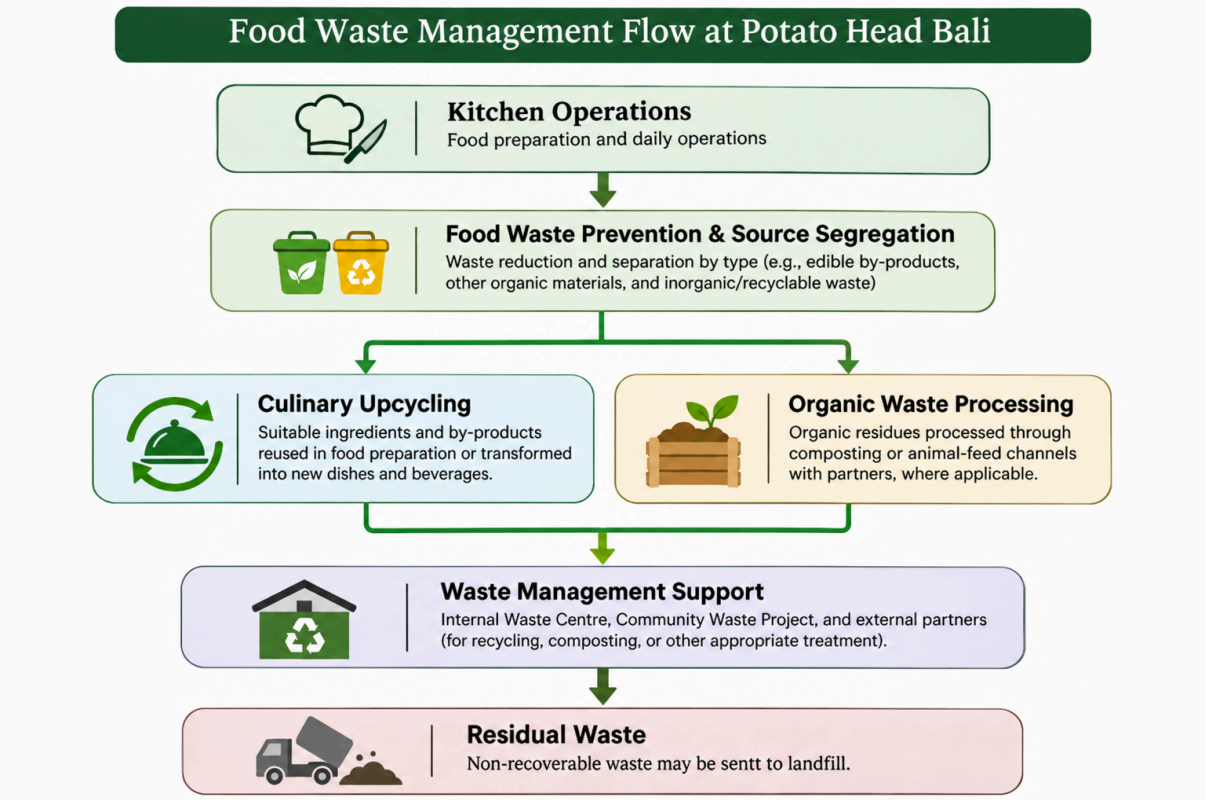


Figure 1. Food Waste Management Flow at Potato Head Bali

As shown in Figure 1, the food waste management process begins with prevention and source segregation at the kitchen level. Suitable ingredients and food by-products may be reused through culinary upcycling, while other organic residues are directed to appropriate processing channels, such as composting or animal feed, where applicable. The internal Waste Centre, Community Waste Project, and external partners support waste handling and recovery. However, materials that cannot be recovered may still be sent to landfill. Overall, this process illustrates how culinary innovation and organizational waste management practices are integrated into Potato Head Bali's sustainability approach. Culinary upcycling represents an important strategy for retaining the value of food materials before they become waste.

4.1.2 Food Waste Prevention in Kitchen Preparation and Service

Information from a Kitchen team representative (Informant K1) indicates that food-waste prevention is addressed during preparation rather than only after waste has been generated. The kitchen applies a root-to-fruit approach to plant ingredients and a nose-to-tail approach to animal ingredients, seeking to use as many suitable parts of each ingredient as possible. The informant also described coordination across restaurants and bars, whereby a by-product that is not required by one section may be considered for use by another.

"At Potato Head Bali, food-waste reduction is mainly carried out through prevention: maximizing the use of ingredients during preparation, processing by-products into new menu ingredients, and coordinating their use between restaurants and bars." (Kitchen team representative, Informant K1; translated from Indonesian)

Examples reported in the interview material include the use of surplus egg whites from bakery production as the basis for a shoyu-style sauce, the processing of fish scales into crackers served at Ijen, the use of watermelon rind as a pickled accompaniment, and the transformation of leftover bread through roasting and fermentation into a miso-like seasoning. These examples illustrate how menu development can create alternative food-use pathways for selected by-products that might otherwise be discarded.

The informant explained that preservation and processing techniques including fermentation, pickling, curing, and dehydration are used to develop new ingredients from selected by-products. A Zero Waste Chef works across restaurants and bars to identify possible uses, while coordination between kitchen sections helps connect the availability of by-products with menu requirements. During service, the use of these ingredients in dishes and beverages makes upcycling part of restaurant production rather than an activity limited to waste demonstrations.

"The Zero Waste Chef works across all restaurants and bars to find uses for leftover ingredients. In this way, a by-product from one section can become an ingredient for another section for example, leftover egg whites from the bakery can be used to make a sauce." (Kitchen team representative, Informant K1; translated from Indonesian)

The interview material also refers to morning and afternoon briefings and the appointment of eco-champions within teams to reinforce reduction, reuse, and recycling practices. These practices suggest that food-waste prevention depends not only on recipe innovation but also on communication and coordination among employees. The available answers do not provide quantified measurements of the amount of food waste prevented through each practice.

4.1.3 Food Safety Considerations in Culinary Upcycling

Food safety was identified as an important consideration in the implementation of culinary upcycling practices at Potato Head Bali. According to the kitchen team informant (K1), the selection of materials was a critical initial step. Culinary upcycling focused on suitable food by-products generated during kitchen preparation, particularly clean kitchen trimmings, rather than plate waste from consumers. As explained by the Kitchen informant:

"We do not upcycle leftover food from guests' plates. Instead, we use food materials that are still suitable for consumption, such as clean kitchen trimmings generated during food preparation." (Kitchen team representative, Informant K1; translated from Indonesian)

The handling of selected by-products also involved attention to processing time, storage conditions, and hygiene. The informant emphasized that clean kitchen trimmings should not be left at room temperature but should be processed promptly, for example through fermentation or dehydration. When immediate processing was not possible, the materials were stored in sterile food-grade containers in a dedicated chiller, separated from other raw food materials to minimize the risk of cross-contamination. The informant explained:

"*Clean food by-products should not be left at room temperature. They must be processed immediately, for example through fermentation or dehydration. If they cannot be processed immediately, they should be stored in sterile food-grade containers in a dedicated chiller, separate from other raw food materials, to prevent cross-contamination*." (Kitchen team representative, Informant K1; translated from Indonesian)

Staff knowledge and training were also identified as supporting elements in maintaining hygienic handling practices. The informant explained that chefs were trained to handle clean food by-products with the same hygiene standards applied to fresh primary ingredients:

"*Every chef is trained to handle clean food by-products with the same high hygiene standards applied to fresh ingredients*." (Kitchen team representative, Informant K1; translated from Indonesian)

These accounts indicate that food safety considerations are integrated into the selection, handling, storage, and processing of materials for culinary upcycling at Potato Head Bali. However, the present study did not independently assess product-specific food-safety controls, verify processing and storage records, or conduct microbiological testing. Therefore, the findings describe food-safety practices reported by the informant rather than establish the microbiological safety of individual upcycled products.

4.1.4 Culinary Upcycling and Organic Waste Processing

The findings distinguish two pathways for organic materials. The first is culinary upcycling, in which suitable food-processing by-products are retained for human consumption and developed into ingredients for other menu items. The second is organic-waste processing, in which materials that are no longer directed to food production are sent for composting or other recovery routes. This distinction prevents culinary upcycling from being confused with the recovery of materials after they have entered the waste stream.

"Culinary upcycling is not taking food back from the waste bin, but planning to use processing by-products as ingredients for other products." (Kitchen and Sustainability team informants; translated from Indonesian)

Examples of culinary upcycling reported by the informants include surplus egg whites used for a shoyu-style sauce, fish scales processed into crackers, watermelon rind prepared as a pickle, and leftover bread roasted and fermented into a miso-like product. The interview material also describes the use of ginger, lemongrass, carrot, and pineapple peel in the development of kombucha or vinegar, as well as tomato skin dried and mixed with salt as a seasoning. These examples show a range of approaches, although the material supplied does not establish that every example was produced continuously or during the same fieldwork period.

Examples of products created through this upcycling process are presented in Figure 2. The figure illustrates how food materials that would otherwise be discarded can be transformed into visually appealing culinary products with added value.



Figure 2. Upcycled products at Potato Head Bali

As shown in Figure 2, the upcycling approach is applied to both food and beverage products. The crispy crackers and crafted cocktail demonstrate how residual ingredients can be creatively processed into products suitable for restaurant service. Figure 2 presents examples of culinary upcycling practices at Potato Head Bali, illustrating how selected food-processing by-products can be transformed into new culinary ingredients and products. These practices demonstrate the integration of food-waste prevention into menu development, where ingredients that might otherwise be discarded are given additional functions and culinary value.

For organic materials that are not reused as food, the reported routes include composting and animal-feed channels through partners. The interview material also identifies selected organic streams, such as fruit and vegetable trimmings, citrus peels, coffee grounds, pineapple leaves, and coconut shells, as materials separated for composting or other garden-related uses. Coconut shells are described as being processed into mulch for a garden in Tabanan, while garden waste is shredded for landscaping purposes. These practices demonstrate that organic materials may be directed to different recovery routes depending on their characteristics.

"Organic materials that are not used in the kitchen are directed to composting or to animal-feed channels through partners." (Sustainability team informants S2-S4; translated from Indonesian)

The interview findings therefore suggest a hierarchy in which suitable by-products are first considered for food applications, while other organic materials are recovered through composting or related pathways. This hierarchy is consistent with the practical distinction between preventing food waste and managing organic waste after it has been discarded from food production.

4.1.5 Monitoring, Staff Involvement, and the Meaning of Zero Waste

Monitoring is described through waste audits, weighing, recording, and data collection by the Community Waste Project. These activities provide information that can support operational review. Staff involvement is encouraged through briefings, eco-champions, and coordination between kitchen and sustainability personnel. The Follow the Waste Tour also makes the internal Waste Centre visible to visitors and provides an educational dimension to the waste-management system.

An important qualification emerges from the interviews: residual waste that cannot be recovered is still sent to landfill. Accordingly, "zero waste" should be understood as an organizational direction to prevent waste and maximize recovery, rather than as evidence that no waste is generated or that all waste is diverted from landfill. The interview material supports the existence of multiple recovery pathways, but it does not provide sufficient quantitative evidence to claim complete landfill diversion or a specific food-waste diversion rate for the study period.

"Because residual waste still exists, the term 'zero waste' should be understood as a direction for waste management and reducing disposal, not as meaning that no waste is generated at all." (Sustainability team informants S2-S5; translated from Indonesian)

4.2 Discussion

The findings of this study provide an understanding of how food-waste management is operationalized at Potato Head Bali through connected kitchen practices, source separation, internal and partner-based processing, and the handling of residual materials. Interviews indicate that the system is not confined to a single facility: the internal Waste Centre operates alongside the Community Waste Project and other processing partners. This highlights the importance of collaboration and shared responsibility in implementing waste-management initiatives in tourism businesses. Community involvement, continuous improvement, and stakeholder collaboration have also been identified as important factors in sustaining zero-waste initiatives (Amanah, Sena, Suhendra, Yatim, & Zaki, 2024; Harmayani et al., 2025; Nizar et al., 2021; Subadra, 2024; Utomo et al., 2023; Wikurendra et al., 2023). In this case, however, the available interview data describe the operational arrangements rather than quantify the environmental outcomes of these partnerships.

The practices identified at Potato Head are relevant to SDG 12 because they combine food-waste prevention with the recovery and appropriate treatment of materials that remain after prevention. The use of selected kitchen by-products as ingredients represents an effort to retain food value, while composting, recycling, upcycling, and partner-based processing provide further routes for materials that are not used in menu production. These practices can be interpreted through circular-economy approaches that seek to improve resource efficiency and reduce disposal. Previous studies have discussed the relationship between circular practices, responsible production, and the implementation of sustainability strategies (Adesoji et al., 2024; Arya & Shukla, 2025; Monfared et al., 2025; Qammar et al., 2023). Nevertheless, the interviews confirm that residual waste that cannot be recovered is still sent to landfill. Therefore, the findings support describing Potato Head as pursuing a zero-waste direction, rather than claiming that the operation generates no waste or achieves complete landfill diversion.

Culinary innovation is an important component of the food-waste prevention practices described by the Kitchen team. Examples include using surplus egg whites to develop a shoyu-style sauce, processing fish scales into crackers, preparing watermelon rind as a pickle, and roasting and fermenting leftover bread into a miso-like seasoning. The informants also described techniques such as fermentation, pickling, curing, and dehydration, alongside coordination between restaurants and bars to identify further uses for by-products. These findings provide practical illustrations of how workflow and menu-development decisions can contribute to more efficient ingredient use, consistent with discussions of culinary innovation in sustainable food practices (Monfared et al., 2025). The use of root-to-fruit and nose-to-tail approaches also reflects the principle of utilizing suitable parts of plant and animal ingredients (Semwal et al., 2024). Such practices are relevant to responsible consumption and production and to the food-waste reduction ambitions of SDG target 12.3 (Munir, 2025; Sadeh & Abu Hijleh, 2024). However, this study does not provide measurements of the quantity of food waste prevented or the change in food waste per guest; its contribution is to document the practices and their operational context.

Integrating culinary creativity with waste management may create opportunities to develop new ingredients and menu components from selected by-products. At Potato Head, the examples reported by informants show that culinary upcycling is incorporated into food preparation and menu use, rather than being limited to a waste-processing demonstration. This is consistent with previous discussions of upcycling and by-product menus as potential contributions to circular food systems (Monfared et al., 2025; Vashishth et al., 2024). The findings should nevertheless be interpreted carefully. Although these practices may create culinary value, the interview data do not measure their production costs, revenue contribution, guest acceptance, or profitability. Consequently, economic benefits and improved competitiveness cannot be claimed as demonstrated outcomes. The "Good Times, Do

Good" philosophy can instead be understood as an organizational orientation supported by coordination between kitchen and sustainability personnel, staff briefings, and the identification of uses for by-products.

Food safety is an important operational consideration in culinary upcycling because the reuse of food by-products requires appropriate selection, handling, storage, and hygiene practices. The findings indicate that Potato Head Bali applies reported procedures that include selecting clean kitchen trimmings rather than plate waste, prompt processing or refrigerated storage, and staff training in hygienic handling. These practices highlight that culinary innovation in hospitality should not be considered separately from food safety management. The value of transforming by-products into new menu ingredients depends not only on culinary creativity but also on maintaining appropriate food-handling practices. Nevertheless, since this study did not independently verify product-specific controls or conduct microbiological testing, the findings should be interpreted as reported operational practices rather than evidence of validated product safety.

The role of the Waste Centre and the Community Waste Project demonstrates an educational and community-facing dimension to waste management. The Follow the Waste Tour enables visitors to observe aspects of collection, sorting, and processing, while the Community Waste Project provides a collective route for waste from participating businesses. These arrangements extend the operational system beyond the kitchen and property boundary. They can be discussed in relation to community-based tourism principles that emphasize inclusivity and shared environmental responsibility (Nizar et al., 2021; Subadra, 2024). The wider social value of community engagement and food-related sustainability initiatives has also been discussed (Harmayani et al., 2025). In this study, however, the interviews establish the presence and functions of these activities but do not quantify their social or economic impacts.

Maintaining the practices described by informants requires coordination, staff participation, and monitoring. The Kitchen team referred to coordination across restaurants and bars, while the Sustainability team described staff briefings, eco-champions, waste weighing, recording, and audit activities. These findings indicate that sustainability implementation depends on operational routines and employee involvement. This is consistent with, who emphasize staff awareness and training in hospitality sustainability programs (Martin-Rios et al., 2026). Previous studies have also identified financial and logistical constraints, including infrastructure requirements and limitations in recycling systems, as barriers to broader implementation (Sailesh, 2025; Vashishth et al., 2024). The current interview material, however, does not provide detailed evidence on infrastructure investment or the specific financial barriers experienced by Potato Head. Such factors should therefore be treated as implementation considerations from the literature, rather than direct findings from this case. The need for coordination among government, academia, and the private sector to support sustainability initiatives is also discussed in previous research (Adesoji et al., 2024; Arya & Shukla, 2025; Qammar et al., 2023).

Overall, the findings show that food-waste management at Potato Head Bali involves related practices: preventing waste through ingredient utilization and culinary upcycling, separating materials at source, directing organic and inorganic materials to appropriate recovery routes, working with external partners, and managing residual waste. The case offers practical insights for other hospitality operations, but transferability depends on local processing infrastructure, partner availability, staff capacity, kitchen operations, and the ability to monitor waste streams. Since this study does not provide a complete quantitative breakdown of food waste or the proportion diverted through each treatment route, it cannot establish the overall diversion rate or demonstrate a universally replicable model. Future research could combine interviews with waste audits, measurements of preparation, service, and plate waste, and records from external processing partners. This would enable a more robust assessment of the contribution of individual practices to food-waste reduction and SDG 12.

5. Conclusions

5.1 Conclusion

This study examined food waste management practices at Potato Head Bali through a descriptive qualitative case study. The findings indicate that food waste management is approached as an interconnected operational process involving waste prevention, source segregation, recovery and processing, culinary upcycling, and staff and visitor education. These practices are supported by cross-departmental coordination and dedicated sustainability personnel.

The case illustrates how circular practices are implemented through both internal and collaborative arrangements. Food preparation by-products that remain suitable for use may be incorporated into other food or beverage preparations through techniques such as fermentation, pickling, and dehydration. Other organic materials are directed to composting or animal-feed channels, while recyclable materials are sorted for recovery through the relevant facilities and partners. The findings also show that waste management is not confined to the property's internal Waste Centre: some materials are handled through the Community Waste Project and external partners. Consequently, the system is better understood as a coordinated network of internal and external waste-management pathways.

The findings support the relevance of circular-economy principles and SDG 12, particularly responsible consumption and production, within hospitality operations. However, the evidence does not establish that all waste is processed on-site or that landfill disposal has been completely eliminated. Residual materials that cannot be recovered may still be sent to landfill. Therefore, the zero-waste-to-landfill philosophy should be interpreted as an organizational direction and continuing effort to minimize residual waste, rather than as a verified condition of zero landfill disposal.

Culinary upcycling emerges as one practical component of this approach. The documented examples show how selected preparation by-products and surplus ingredients can be repurposed as inputs for other menu or product preparations. In this case, upcycling is planned as part of ingredient utilization and product development; it does not involve recovering food from waste bins. The study therefore identifies culinary upcycling as an operational practice that connects food-use efficiency with culinary experimentation. Nevertheless, the qualitative evidence does not demonstrate its financial returns, profitability, market acceptance, or measurable contribution to competitive advantage. The findings further highlight that culinary upcycling needs to be supported by appropriate food selection, handling, storage, and staff hygiene practices to maintain food safety throughout the process.

Overall, the Potato Head Bali case provides an example of how hospitality businesses can organize food waste prevention and recovery through management commitment, staff involvement, operational routines, education, and collaboration with external partners. The practices may offer lessons for other hospitality businesses, but their transferability depends on factors such as organizational commitment, staff capacity, infrastructure, partner availability, and resources. The findings should therefore be treated as context-specific insights rather than as evidence of a universally replicable model.

5.2 Research Limitations

This study has several limitations. First, it examines a single case at Potato Head Bali. Although the case provides an in-depth understanding of food waste management and culinary upcycling practices within this organizational setting, its findings cannot be generalized to all hotels, restaurants, or tourism destinations. Potato Head has dedicated sustainability personnel, established sustainability programs, and access to internal and external waste-management facilities. These organizational and infrastructural conditions may differ substantially from those of smaller or less-resourced hospitality businesses.

Second, the descriptive qualitative design was intended to explore operational practices and stakeholder accounts rather than to quantify environmental or economic outcomes. The relatively short observation period, comprising approximately two hours in total, also limited the researchers' ability to capture variations in routine food-waste management practices across different operational

periods. Although observations complemented interview accounts and document analysis, they did not constitute continuous monitoring of daily operations. Furthermore, information about the 2023 waste audit conducted in collaboration with Eco Mantra was obtained solely through informant interviews, as the audit records were not available for independent examination. Therefore, this information provides historical context but cannot independently verify changes in waste-management performance or establish quantitative comparisons with the 2025 fieldwork findings. The available evidence also did not provide complete, category-specific measurements of food waste generated, prevented, reused, composted, recycled, or sent to landfill during the study period. Consequently, the study cannot verify a complete landfill-diversion rate or quantify changes in waste generation. Similarly, costs, savings, revenue, profitability, and greenhouse-gas emission reductions associated with the reported practices were not measured.

Third, the study primarily reflects the perspectives of internal stakeholders, particularly members of the Sustainability team, together with one Kitchen team informant and observations of selected operational practices. Although these participants provided relevant insights into organizational sustainability initiatives and kitchen-level activities, the limited representation of the Kitchen team means that the findings may not capture the full range of operational perspectives across kitchen personnel. In addition, the views of guests, suppliers, community members, government agencies, and external waste-processing partners were not examined in comparable depth. Their perspectives could provide further insight into user acceptance, partnership effectiveness, and the wider social and environmental implications of the system.

Finally, although informants described food-safety practices associated with culinary upcycling, this study did not specifically assess or independently verify the food-safety controls applied to each individual product. The reported examples were primarily supported by informant accounts and limited kitchen observations. The study did not include a dedicated food-safety audit, microbiological testing, or independent examination of product-specific processing and storage records. Therefore, the findings demonstrate reported culinary upcycling practices but cannot establish the microbiological safety of the resulting products. Future research could examine these practices through more extensive process observations, systematic assessment of food-safety controls, verification of temperature and storage conditions, and appropriate microbiological testing.

5.3 Suggestions and Directions for Future Research

Future research could compare food waste management practices across hotels, restaurants, and tourism businesses with different organizational sizes, market segments, resource levels, and sustainability commitments. Such comparisons would help identify which elements of the Potato Head approach may be transferable and what organizational or infrastructural conditions are required.

Further studies should combine qualitative inquiry with systematic quantitative measurement. Relevant indicators include food waste generated per guest or cover, quantities prevented and reused, amounts sent to composting or animal-feed channels, recyclable recovery, and residual waste sent to landfill. Where reliable data are available, researchers could also assess implementation costs, food-cost savings, revenue from upcycled products, investment requirements, and greenhouse-gas emission impacts. These measurements would help test environmental and business outcomes that could not be established in the present study.

Research on culinary upcycling could examine product development processes, food safety and quality controls, guest acceptance, willingness to try and purchase, and willingness to pay for products made from suitable food by-products. Further work could also investigate how employee knowledge, training, motivation, briefings, and organizational culture influence the consistency of waste prevention and segregation practices, including under conditions of staff turnover.

Finally, future studies could examine the governance and partnership arrangements that support hospitality waste-management systems. This includes the roles of local regulations, public incentives, community-based facilities, suppliers, waste processors, educational institutions, and local

governments. Such research would clarify how collaboration across organizational boundaries can support responsible consumption and production while recognizing the practical constraints faced by different tourism businesses.

Acknowledgement

The authors would like to express their sincere gratitude to Politeknik Pariwisata Bali**,** particularly the Centre for Research and Community Service (*Pusat Penelitian dan Pengabdian kepada Masyarakat*/P3M), for its institutional support, guidance, and facilitation throughout the implementation of this research. The authors also extend their appreciation to the management and staff of Potato Head Bali, for their valuable cooperation, openness, and willingness to share information, operational experiences, and relevant documentation related to the implementation of food waste management and sustainability practices. Their support and participation were essential to the completion of this study. Finally, the authors thank all informants and other parties who contributed their time, knowledge, and assistance during the data collection and research process.

Author Contributions

NPET: Conceptualization, Methodology, Investigation, Formal Analysis, Data Curation, Visualization, and Writing–Original Draft. IMPDA: Investigation, Validation, Data Curation, and Writing–Review & Editing. MH: Supervision, Project Administration, Validation, and Writing–Review & Editing. All authors read and approved the final manuscript and agreed to be accountable for all aspects of the work.

References

Adesoji, A. A., Ade-Omowaye, J., Afolalu, A., & Sunday, O. A. (2024). Waste to wealth: Engineering solutions for SDG 12. Paper presented at International Conference on Science, Engineering and Business for Driving Sustainable Development Goals (SEB4SDG), 1-8. doi:.

Ally, B., Abdulkadir, A., Remmen, A., Hirsbak, S., Mwevura, H., Furu, P., & Salukele, F. (2024). Food waste management at selected tourist hotels in Zanzibar: Current practices and challenges in creating a circular economy in the hospitality sector. *Sustainability*, *16*(24), 1-23. https://doi.org/10.3390/su162410850

Amanah, N., Sena, B., Suhendra, B., Yatim, A., & Zaki, S. A. (2024). Empowering society and culinary MSMEs for sustainable development goals initiatives in West Java. *Journal of Sustainable Tourism and Entrepreneurship*, *5*(3), 159-178. https://doi.org/10.35912/joste.v5i3.1756

Arya, A., & Shukla, R. (2025). Trash talk: A review of evolving waste management paradigms. *International Journal of Computational and Experimental Science and Engineering*, *11*(1), 679-693. https://doi.org/10.22399/ijcesen.891

Aslam, J., Parray, H. A., Aslam, A., & Aslam, R. (2024). Food waste environmental impact assessment. *Sustainable Food Waste Management, 87-105. doi:*. https://doi.org/10.1007/978-981-97-1160-4_5

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? Qualitative health research, 26(13), 1802-1811. *doi:*. https://doi.org/10.1177/1049732316654870

Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative research journal*, *9*(2), 27-40. https://doi.org/10.3316/QRJ0902027

Budiman, D. N., Sangari, F., & Lewan, Y. S. (2025). The role of waiters in improving service quality at seafood restaurant, NDC resort and spa Manado. *Jurnal Studi Perhotelan dan Pariwisata*, *4*(1), 1-11. https://doi.org/10.35912/jspp.v4i1.6895

Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, *41*(5), 545-547. https://doi.org/10.1188/14.ONF.545-547

Chourasia, B. (2025). Sustainable waste disposal systems in the hotel industry innovations, challenges, and opportunities: A case study of Guwahati, India. *Solid Waste Management for Rural Regions, 299-308. doi:*. https://doi.org/10.4018/979-8-3693-8527-2.ch017

DeJonckheere, M., & Vaughn, L. M. (2019). Semistructured interviewing in primary care research: A balance of relationship and rigour. *Family medicine and community health*, *7*(2), 1-8. https://doi.org/10.1136/fmch-2018-000057

Filimonau, V., Sezerel, H., Ashton, M., Kubal-Czerwińska, M., Bhaskara, G. I., & Ermolaev, V. A. (2024). How chefs develop the practice to manage food waste in professional kitchens. *International journal of hospitality management, 119, 1-13. doi:*. https://doi.org/10.1016/j.ijhm.2024.103712

Harmayani, K. D., Trinadya, I. G. A. A., Widhiawati, I. A. R., Wiryananda, N. G. A. K., Andika, I. B. M. B., Suari, P. P. V., . . . Satyawati, K. L. (2025). Assessing the effectiveness of the zero waste city program in village-scale waste management: A case study of emerging contaminants in Lebih Village, Gianyar Regency. *Environmental Quality Management*, *35*(1). https://doi.org/10.1002/tqem.70131

Herrero, M., Thornton, P. K., Mason-D'Croz, D., Palmer, J., Benton, T. G., Bodirsky, B. L., . . . Nyborg, K. (2020). Innovation can accelerate the transition towards a sustainable food system. *Nature food*, *1*(5), 266-272. https://doi.org/10.1038/s43016-020-0074-1

Martin-Rios, C., Ruiz-Molina, M. E., Filimonau, V., & Rogenhofer, J. B. (2026). Food waste as a sustainability challenge: Educational strategies for aligning attitudes and behaviors. *International Journal of Sustainability in Higher Education*, *27*(6), 1503-1520. https://doi.org/10.1108/IJSHE-10-2024-0712

Mehrotra, A., Agarwal, R., Awan, U., Walsh, S. T., & Yaqub, M. Z. (2025). Zero waste solutions in hospitality: Technology alignment and agile management practices for responsible consumption and production of food. *Journal of Sustainable Tourism*, *33*(12), 2715-2748. https://doi.org/10.1080/09669582.2024.2427821

Memon, M. F., Kutty, S. R. M., & Memon, Z. A. (2024). From scraps to soil enrichment: Rethinking food waste and sludge for a greener agriculture. Paper presented at Proceedings of the International Conference on Sustainability: Developments and Innovations, 207-214. doi:.

Miati, N. L. P. M., Ariyanto, D., Widanaputra, A. A. G. P., & Putri, I. G. A. M. A. D. (2026). Mapping sustainability performance in the hospitality industry: A systematic literature review and future research agenda. *Annals of Human Resource Management Research*, *6*(1), 1-19. https://doi.org/10.35912/ahrmr.v6i1.3038

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook*. New York: Sage Publications.

Monfared, M., Marandi, F., & Sauer, P. C. (2025). Achieving sustainable development by integrating circular economy principles into solid waste management: A systematic literature review and research agenda. *International Journal of Production Economics, 290, 1-20. doi:*. https://doi.org/10.1016/j.ijpe.2025.109787

Muchingami, A., Basera, V., Mashoko, D., & Bhasopo, T. (2025). Sustainable tourism practices adopted by the hotel sector in Zimbabwe: Hotel managers perceptions. *Journal of Sustainable Tourism and Entrepreneurship*, *7*(1), 35-45. https://doi.org/10.35912/joste.v7i1.2491

Munir, K. (2025). Towards sustainable food waste management in restaurants: A case study by applying social practice theory. *International Journal of Gastronomy and Food Science, 42, 1-9. doi:*. https://doi.org/10.1016/j.ijgfs.2025.101293

Nazibudin, N. A., Sabri, S. A. M., & Abd Manaf, L. (2025). Aligning with sustainable development goals (SDG) 12: A systematic review of food waste generation in Malaysia. *Cleaner Waste Systems, 10, 1-9. doi:*. https://doi.org/10.1016/j.clwas.2025.100205

Nizar, M., Munir, E., Munawar, E., & Irvan, I. (2021). Waste management optimization in Banda Aceh: Towards a zero-waste city. *Ecological Engineering & Environmental Technology*, *22*(5), 18-27. https://doi.org/10.12912/27197050/139465

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and policy in mental health and mental health services research*, *42*(5), 533-544. https://doi.org/10.1007/s10488-013-0528-y

Qammar, R., Abidin, Z. U., Sair, S. A., Ahmad, I., Mansour, A. a. Z., & Owidha, H. F. A. A. (2023). Impact of waste management among Industry 4.0 and sustainable development. *Environmental Science and Pollution Research*, *30*(45), 100743-100752. https://doi.org/10.1007/s11356-023-28987-8

Sadeh, R. Z., & Abu Hijleh, B. (2024). Investigating the food waste status in the hospitality sector of the Emirate of Dubai-UAE. *BUiD Doctoral Research Conference 2023: Multidisciplinary Studies, 182-189. doi:*. https://doi.org/10.1007/978-3-031-56121-4_18

Sadyasmara, C. A. B., Yuarini, D. A. A., Antares, A., Satriawan, I. K., Wiranatha, A. A. S., Yoga, I. W. G. S., . . . Arnata, I. W. (2025). Quantification and classification of food waste from hotels and restaurants in Bali as a potential database towards sustainable food waste management. *BIO Web of Conferences, 186, 1-9. doi: Şahin, E., Yiğitoğlu, V., Gök Demir, Z., Karakaya, Ç., Erendağ Sümer, F., & Güneri, B. (2024). Circular economy for sustainability: A bibliometric analysis for the tourism/hospitality field. Sustainability*, *16*(15), 1-20. https://doi.org/10.1051/bioconf/202518604002

Sailesh, B. (2025). Culinary adventures: A journey through time and space. *Global Sustainable Practices in Gastronomic Tourism, 91-136. doi:*. https://doi.org/10.4018/979-8-3693-7096-4.ch006

Sandelowski, M. (2000). Whatever happened to qualitative description? Research in nursing & health, 23(4), 334-340. *doi:*. https://doi.org/10.1002/1098-240x(200008)23:4%3C334::aid-nur9%3E3.0.co;2-g

Semwal, R., Bairwa, M. K., Tripathi, N., & Chauhan, A. (2024). *Innovative methods of waste reduction in the food production department of hotels and restaurants*.

Sezerel, H., Kılıcaslan, H., Filimonau, V., & Dülger, E. (2025). The role of chefs' creativity in food waste management in professional kitchens. *International journal of hospitality management, 128. doi:*. https://doi.org/10.1016/j.ijhm.2025.104183

Srivastava, S., Chittiprolu, V., Jaswal, R., & Kundu, R. (2025). Food waste in academic institutions: Testing theory of planned behavior on intention to reduce wastage of food. *Solid Waste Management for Rural Regions, 215-226. doi:*. https://doi.org/10.4018/979-8-3693-8527-2.ch012

Subadra, I. N. (2024). Managing restaurant's food loss and waste at the Aburi Sushi Bali: A sustainable culinary tourism enterprise model in Bali. *Jurnal Kajian Bali (Journal of Bali Studies)*, *14*(1), 191-214. https://doi.org/10.24843/JKB.2024.v14.i01.p09%20

Subri, U. S., Ghani, N. M., Mastam, N. M., Zakaria, A. F., Mustafa, M. S. S., Muhammad, A. A., & Damanhuri, D. (2025). Sustainable solutions for household waste management: Transforming UCO into soap in local communities. *Multidisciplinary Reviews*, *8*(9), 1-10. https://doi.org/10.31893/multirev.2025196

Sucheran, R. (2024). *Sustainable Waste Management in the Tourism and Hospitality Sectors*. Hershey: IGI Global Scientific Publishing.

Suryawan, I. W. K., Suhardono, S., Rahman, A., Phan, T. T. T., & Lee, C.-H. (2025). Hypothetical scenarios for circular bioeconomy preferences in the Bali metropolitan area. *Waste Management Bulletin*, *3*(3), 1-14. https://doi.org/10.1016/j.wmb.2025.100197

Udodiugwu, M. I. (2024). Sustainable waste management and organizational performance of food and beverage firms. *Annals of Management and Organization Research*, *5*(4), 241-254. https://doi.org/10.35912/amor.v5i4.2004

Utomo, M. M. B., Pieter, L. A. G., Putra, H. P., & Siagian, C. M. (2023). Manifesting a sustainable circular economy in waste management by linking to Paddy Farming in Gianyar Regency, Bali. *IOP Conference Series: Earth and Environmental Science*, *1190*(1), 1-10. https://doi.org/10.1088/1755-1315/1190/1/012011

Vashishth, T. K., Sharma, V., Agarwal, S., Gupta, N., Singh, S., & Sharma, R. (2024). Embracing the current challenges in sustainable waste management in tourism and hospitality. *Hotel and Travel Management in the AI Era, 219-256. doi:*. https://doi.org/10.4018/979-8-3693-7898-4.ch011

Voss, M., Valle, C., Calcio Gaudino, E., Tabasso, S., Forte, C., & Cravotto, G. (2024). Unlocking the potential of agrifood waste for sustainable innovation in agriculture. *Recycling, 9, 1-28. doi:*. https://doi.org/10.3390/recycling9020025

Wikurendra, E., Abdeljawad, N., & Nagy, I. (2023). A review of municipal waste management with zero waste concept: Strategies, potential and challenge in Indonesia. *International Journal of Environmental Science and Development*, *14*(2), 147-154. https://doi.org/10.18178/ijesd.2023.14.2.1427

Wiratama, I., & Wijaya, I. (2024). Study on temple waste management and its potential for reducing carbon emission. *Revista de Gestão Social e Ambiental*, *18*(4), 1-23. https://doi.org/10.24857/rgsa.v18n4-103