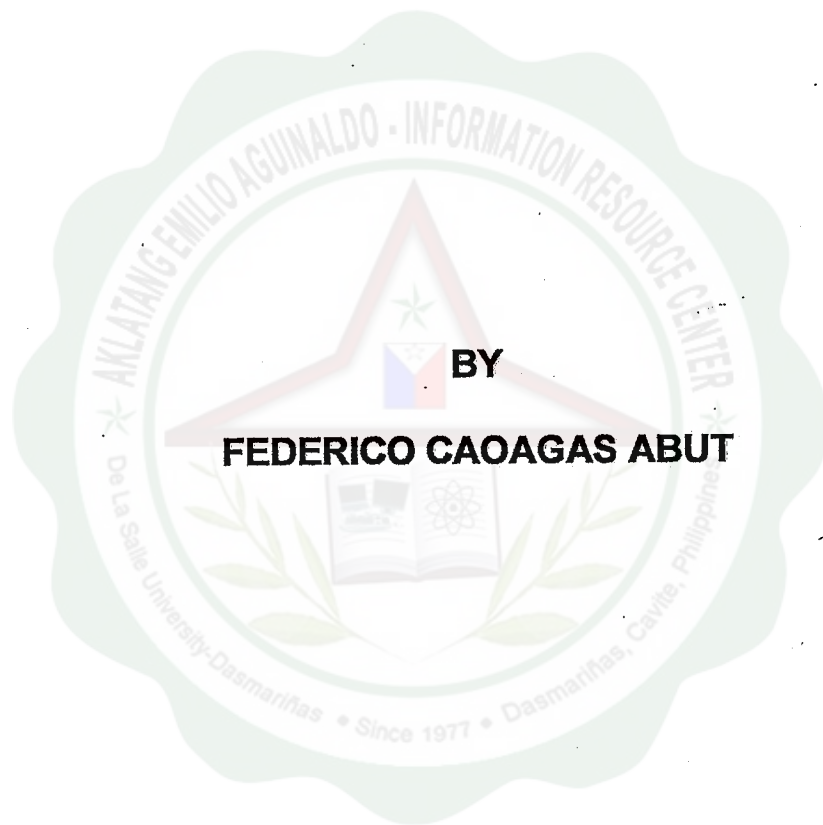


THE PHILIPPINE WOMEN'S UNIVERSITY

GREEN PRACTICES IN KITCHEN STEWARDING OF HOTELS



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GREEN PRACTICES IN KITCHEN STEWARDING OF HOTELS

A Thesis

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Master of Science in Hotel and Restaurant Management**

**By
Federico Caoagas Abut**

THESIS ABSTRACT

GREEN PRACTICES IN KITCHEN STEWARDING OF HOTELS

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Abstract

Hotel businesses consume significant amounts of natural resources, expel large amounts of raw and solid waste and affect the sustainability of the natural environment in which they are developed and operate. To reduce the negative impact on the environment, the hotel sector worldwide has embarked on a course of implementing green practices, an innovation which has been profoundly promoted to offer additional benefits to its adopters. Among various environmental issues that have been addressed, greening in the hotel industry is rarely investigated.

The study was conducted to identify the green practices in the stewarding department of deluxe hotels. Results of the study were used to propose set guidelines in implementing green practices in the kitchen stewarding department of hotels.

Participants of this study composed of the Chief Stewards of selected hotels in Metro Manila.

Areas covered during the survey included the following: energy, water conservation, waste management, and recycling.

To achieve the objectives of this study, a survey questionnaire was used to collect the needed data. The data was collected through a questionnaire distributed to 10 hotels that agreed to participate in this research, out of which 18 hotels were involved in completing the survey. In total, 10 Chief Stewards participated in this study, representing 10 hotels from different parts of Metro Manila. The key issues identify in this study were green practices in kitchen stewarding of hotels

Hotels that participated in this showed greater involvement in energy, water, use of green products and waste management practices

The descriptive statistics was used to make a meaningful quantitative analysis of the data gathered. To interpret the data pertaining to the profile of the hotel participants the frequency percentage was used. To identify the best practices in environmental conservation being implemented by the hotel kitchen stewarding personnel, the weighted means were used. To determine the significant difference in the ratings of the participant the Analysis of Variance (ANOVA) was utilized.

Summary of Findings

The "green" practices implemented in kitchen stewarding are: energy and water conservation, and waste management.

For energy conservation, the following practices are observed: dish-washing machines are shutdown between washes when volume of glassware, dishware, silverware and other equipment levels are low, use fluorescent, CFL or LED lighting in kitchen areas, air-conditioning is maintained by the status of kitchen room and

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test boiler efficiency by adjusted fuel ratio, based on the ratings 93.5% of the participating hotels always practice this activities.

For water conservation, dishwashing machine operate on low water cycle, rinse water are recycled for the next prewash, food scraps and grease are removed before pre-rinsing, floors are swept or mopped instead of hosing it down with water, sinks are used to scrub left-over food items and grease, pots and pans are rinsed in sinks, water saving devices are installed in kitchen faucets, spray heads are replaced to reduce flow, and spray nozzles are used that automatically shut-off, based on the ratings 89% of the participating hotels are moderately practice this activities.

"Green" products used include Energy-Star labelled equipment. "Energy Star" appliances and equipment provides detailed information about energy-saving appliances and monitoring system.

For waste management, the following practices are observed: wastes are segregated and recycled, color-coded bins are used for different types of waste. Under the recycling scheme waste paper, newspapers, glass/plastic, bottles and cans are collected, segregated and sold, leftover foods are segregated and sold to piggery farms, used cooking oil is filtered using an oil recycler, and suppliers are encouraged to use recyclable packaging materials, based on the participating hotels rating 96% practices on waste segregation and 92% on recycling.

Conclusions

Based on the foregoing findings, the followings, conclusions were obtained

1. The result of the ratings revealed that selected deluxe hotels have the same extent of use of the green practices particularly energy

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conservation, water conservation, waste management and employee's education and training.

2. There is no significant difference among the ratings of the participants on the implementation of green practices in kitchen stewarding of hotels.
3. There are no specific guidelines on hotel kitchen stewarding that will promote energy, water and waste management which will result in a more comprehensive green activities. Each hotel develops its own green practices program.
4. Less cooperation and awareness on the green project, sustainability, high implementation and maintenance cost, resistance among the staff and inadequacy of the work area were some of the issues and concern among the selected deluxe hotels.

Recommendations

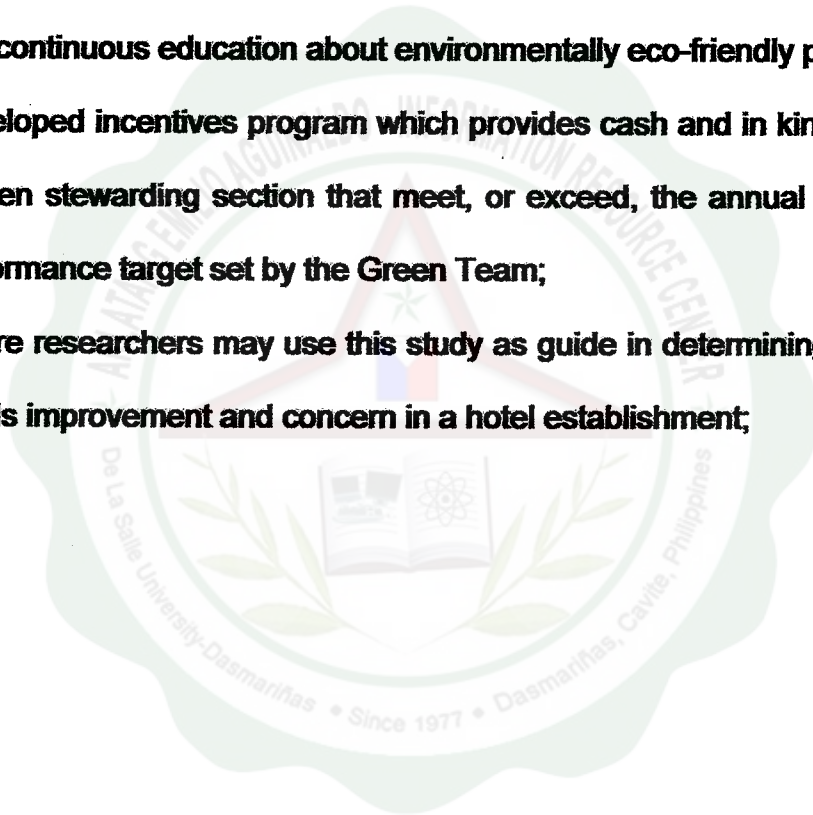
Based on these conclusions, the following are recommended:

1. Development of green practices guidelines based on the proposed "Green Stewarding Operational Guidelines" for hotels;
2. The proposed guidelines on "Green Stewarding" of hotels are recommended to be disseminated to all hotels kitchen stewarding and restaurant to provide a good concept of green practices which could be helpful in their green activities programs to address issues such as water conservation, energy conservation, and waste management;

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3. **Strict implementation of the developed guidelines must be implemented for every kitchen stewarding to ensure green practices goal are met and maintained;**
4. **Education and training among hotel stewards must be conducted regularly and continuous education about environmentally eco-friendly practices;**
5. **Developed incentives program which provides cash and in kind awards to the kitchen stewarding section that meet, or exceed, the annual green practices performance target set by the Green Team;**
6. **Future researchers may use this study as guide in determining the areas that needs improvement and concern in a hotel establishment;**



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LIST OF ACRONYMS USED IN THE STUDY



EMS	Environmental Management Systems
EMP	Environmental Management Practices
ANSI	American National Standards Institute
PDCA	Plan Do Check Act
IH&RA	International Hotel and Restaurant Association
UNEP	United Nations Environment Program
EPA	Environmental Protection Agency
LEED	Leadership in Energy and Environmental Design
LGU	Local Government Unit
OVR	Ordinance Violation Receipt
EMB	Environmental Management Bureau
DENR	Department of Environment and Natural Resources
CSR	Corporate Social Responsibility
CFL	Compact fluorescent Light
HVAC	Heating, ventilating, and air conditioning