

# Study of Recyclable waste Generated in Pune Star Hotels with Reference to Guest Rooms

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## Abstract

Hotels everywhere are growing with the growth in the number of tourist. These hotels generate large amount of solid and hazardous waste. To manage this waste effectively at the hotel level has become a major challenge for the guest. It is due to various reasons like management attitude to awareness amongst guest, or employee behaviour. At the same time if managed effective by overcoming these challenges, it also benefits the hotel in terms of monetary benefits to recognition in the society and even awards and certification. By recycling these wastes, a hotel can reduce operating costs, and maintain sustainability. This study is based on the waste management practises followed by some of the five star properties in Pune. It also discusses about the challenges faced by these hotels in doing so. It focuses on some of the benefits to the hotel in managing the waste generated in hotel rooms. To conduct this research, primary data was collected by approaching the hotels through a structured questionnaire and obtaining their views on the benefits and challenges of managing hotel room waste. The result of the data analysis reveals that all the hotels consciously follow recycling practices. However the methods and the amount of recycling vary from hotel to hotel.

**Keywords:** Recyclable Waste, Recycling, Guest Rooms, Solid Waste Management

## Key Terms and Definitions

For the purpose of ease of understanding certain terms are defined as follows:

**Recycling:** Recycling in Hotels & Motels- A guide for Hotel & Motel Recycling Managers December 1993 has defined recycling as, "Recycling is the process by which materials, otherwise destined for disposal, are collected and used as raw materials for new products."

**Recycling:** It is the practice of reusing items that would otherwise be discarded as waste. Whatis.com

**Waste Management:** Waste management is the "generation, prevention, characterization, monitoring, treatment, handling, reuse and residual disposition of solid wastes". Wikipedia

**Solid Waste Management:** It refers to the supervised handling of waste material from generation at the source through the recovery processes to disposal. Published by Glossary of Environment Statistics.

**Sustainability:** According to Wikipedia, companies are encouraged to improve their environmental efficiencies each year by eliminating waste through resource recovery practices, which are sustainability-related activities.

## INTRODUCTION

### Waste Management in Hotels

Due to globalization, there has been a substantial growth in the tourism industry which leads to increase in the number of guests visiting hotels. As per the report of Ministry of Tourism (Govt. of India, 2012), India received 6,290,319 international tourists and the number is ever increasing. This ultimately leads to increase in the waste

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generated in hotels. The present trend of convenience consumerism offered by hotels to its guests is generating much more waste than consumed. Considering this fact it is necessary to identify waste generated in hotels. Only then the efficient way of this alarming issue can be solved and strategies can be developed to overcome this problem.

The term waste usually relates to materials produced by human activity, and the process is generally undertaken to reduce their effect on health, the environment or aesthetics. Over a period of time, it has been found through research that 50-65 % of the waste generated in the hotels can be recycled. The solid waste generated in hotels could be in the form of organic waste: kitchen waste, vegetables, flower leaves, fruits, toxic waste paints, bulbs, spray cans, pesticide containers, shoe polish; Recyclable: Paper, glass, metals, plastics and other solid waste such as rags etc . However, waste is not something that should be discarded or disposed off. It can further be a valuable resource if addressed correctly, through policy and practice. With the help of consistent waste management practices followed by hotels, there is an opportunity to reap a range of benefits like economical, social, environmental, etc.

### Recyclable Waste Management: Need and Significance

According to Wikipedia Recycling is a resource recovery practice that refers to the collection and reuse of waste materials such as empty beverage containers. The materials from which the items are made can be reprocessed into new products. However this program requires research, evaluation, time, money and positive attitude of the organization. Hotel recycling programs focus on collecting recyclable materials from the hotel's waste stream for recycling and purchasing products made from recycled content (recycling in hotels and motels A Guide For Hotel and Motel Recycling Managers-Florida). Each hotel will have a different amount of waste to be recycled depending upon the size of the hotel, its occupancy levels, guest activities, purchasing practices of the hotel, etc. Irrespective of the type of the hotel, it usually generates paper, glass, plastic, used bathroom amenities in their hotel rooms during the daily operations. In addition to this, there are bed linens, electronic items, furniture, etc which is generated periodically which can be recycled. Recycling is normally done in three steps. First by collecting the recyclable material, secondly by processing

it into recyclable form and finally by purchasing the goods made with reused material. The Central Recycling Center (CRC) is an area where recyclable materials are stored at the hotel facility until transported to a processor.

One of the major benefit of recycling is it prevents useful material from being land filled and thus saves energy and natural resource. The recycling team should involve not only the hotel staff but the hotels guests too. If the hotel takes initiative to inform the guests, they willingly participate in the same. This information can be provided by placing information cards in guest rooms. This informs the guest where to leave their recyclable material.

### Limitations

1. The study is based on recyclable waste generated in guest room only.
2. The study covers only a few star category hotels in Pune.
3. There are other ways of waste entering into the hotel like junk mail, waste created by contractors, convention waste, etc. which is not considered as a part of this study.

### LITERATURE REVIEW

**Josefina S. Viernes (2014)** conducted a research to study the extent of implementation of green practices in the housekeeping and food and beverage departments among standard hotels in Puerto Princesa City, Palawan with respect to solid waste management, water conservation and energy utilization. It was concluded that solid waste management is the most implemented practice.

**Sealey, Kathleen Sullivan & Smith, Jarrell August (2014)**, mentions in their research about the costs and resources required for food waste recycling and some barriers to implementing more effective solid waste management for the tourism industry on small island.

**Jyoti, Gunjan Malik & Shilpi Ahlawat July (2013)** in their research paper on Hotel Housekeeping concluded that practising waste management effectively can lead to hotel growth and its profitability.

**Dr. Sandeep Malik & Dr. Sanjeev Kumar (2012)** suggested that hotel industry is one of the major contributors for the increased GDP. Hotels are the major

consumers of resources and contribute heavily toward the waste generation, as compared to others. The study suggested practical remedies to ensure lower waste generation and better waste management.

**Nworuh, O.B; Morakinyo, O.M; Iwuala, C.C; Nwoke E.A and Ukomma, S.A Mrch (2011)** did a descriptive study on waste disposal and management practices. It revealed that those facilities do not document their waste disposal activities and they are unsustainable.

**Meenakshi Pandey & Manish Pandey (2011)** stated in their research paper about the recent practices adopted by housekeeping department in hotels and their efforts to manage solid waste for achieving sustainability of the environment. They opined in the paper that present age and culture of convenience consumerism offered by hotels to its guests is generating much more waste than consumed. The rapid development and the changing business scenario is making the task of handling waste management and its proper disposal, a difficult task.

**Hatem R.I. Radwan, Eleri Jones and Dino Minoli (2009)** focused in their research about the Solid Waste Management practices in small hotels in United Kingdom. The results revealed that only few small hotels were considering the adoption of Solid Waste Management, either because hoteliers felt negatively about sustainable Solid Waste Management alternatives or perceived challenges from the Government.

**Tang, Janeen (2004)** examined about a case study on Hotel Solid Waste Management Program. Their main objective was to provide information on various issues relevant to Solid waste Management in developing countries and challenges faced by them in doing so.

**Shanklin, Carol W. et al. (1991)** studied in their research about the solid waste management issues in hotels. Two issues were rated most important in their research, which were waste disposal fees and a positive public image

**Florida Hotels & Motel Association, December (1993)** published a guide for recycling in Hotels & Motels. In the guide they published about recycling in general, its benefits in saving energy, how to organize a recycling plant in a hotel, employees as well as guests involvement the recycling program and also about the waste.

## OBJECTIVES

1. To list the various recyclable wastes generated in hotel guest rooms.
2. To identify the various methods adopted for treating the recyclable material in guest rooms.
3. To study the benefits of adopting recycling practices by hotels.
4. To explore the various challenges faced by hotels in implementing recycling practices.

## RESEARCH METHODOLOGY

**Type of Research:** This study based on recyclable waste generated in guest rooms of hotels in Pune included following methods of data collection.

### Methods of Data Collection

**Primary Data** – It was collected with the help of questionnaire technique. A structured questionnaire was prepared and distributed to top star hotels in Pune taking into account the objectives of the study. The responses were obtained from the housekeeping department of the hotels as the study is based on hotel rooms.

**Secondary Data** – It was collected from published/unpublished literature on waste management in the hotel industry, recycling of wastes in hotels, latest references available from the journals, newspapers, research publications and magazines, past records and training reports of the hotel, and other relevant sources like internet.

## OBSERVATIONS AND DISCUSSIONS

Hotels in Pune are facing waste management as a major challenge today. Following observations were made based on the research. They are mentioned as follows:

1. The study observed that there is a scope for guest room waste which can be recycled.
2. There are conscious efforts being made by the hotels to face the challenge of waste management. These include awareness amongst the employees, training of the employees, awareness amongst the guests, practicing eco-friendly procedures.

Figure 1:

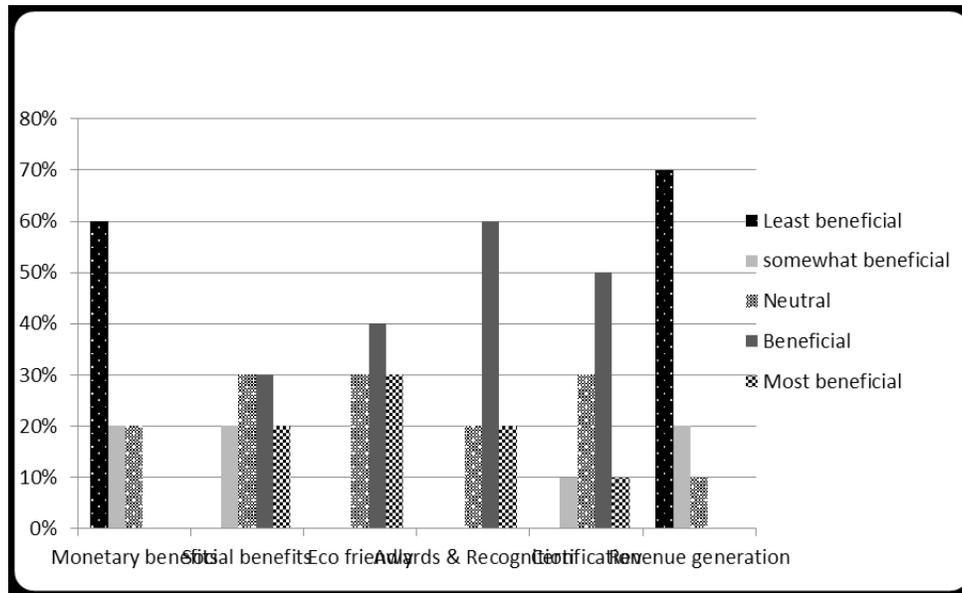
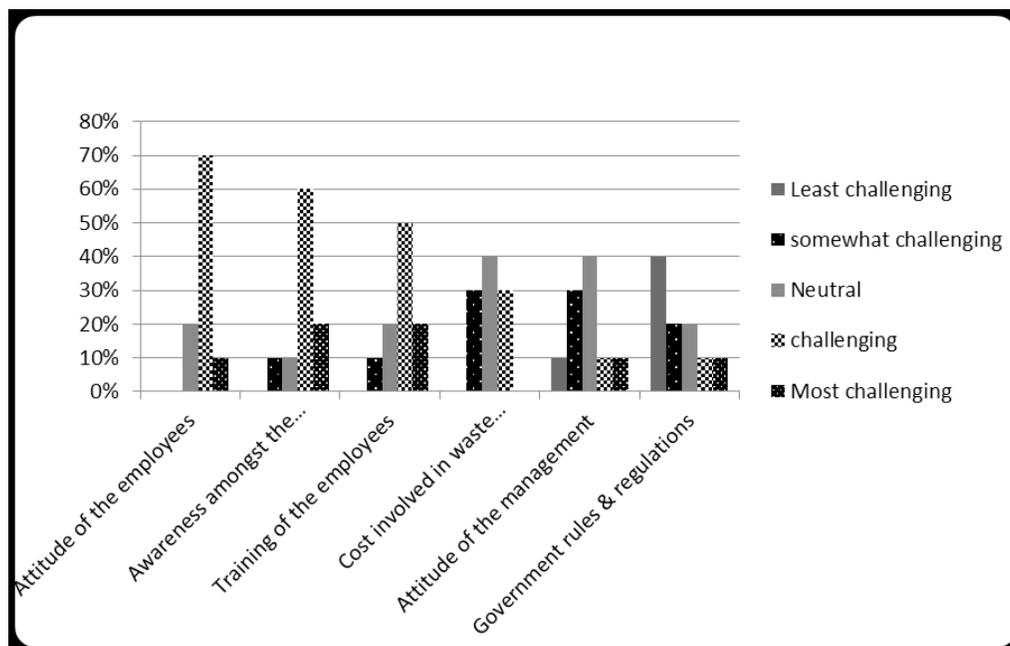


Figure – 2



- Hotels usually follow waste management techniques for various benefits that include monetary benefits, social benefits, environmental benefits, and awards and recognition.
- It was also observed that the hotel has to face numerous challenges in practicing waste management program. These includes attitude of the employees,

cost involved in implementing the program, and the cooperation from the management.

### DATA ANALYSIS & INTERPRETATION

The analysis of data was bifurcated into three parts. The first part is about the various methods adopted by the hotels to treat the waste generated in the room. The

second part is based on the various benefits availed by the hotel in practicing the waste management program. And the third part is based on the numerous challenges faced by the hotels in implementing the waste management program successfully.

**Findings: Analysis of various methods adopted by the hotels in treating the waste generated in the room is as follows:**

- The guest room stationary in the room, if unused is normally reused by the hotel housekeeping.
- Plastic bottles, tins & cans and electronic waste from the room is usually sold to the outside agency for revenue generation.
- Newspapers and magazines are recycled but by the outside agency.
- Food waste like peels of fruits is sent for vermicul-ture. However other cooked food waste is dumped as garbage.
- Use of flowers is reduced by most of the business properties. They are kept only as per the guest category or as per the demand.
- Guest room furniture is reused in other back office areas of the hotel.
- Basic bathroom amenities like soap and shampoo is reduced. To practice this dispensers are used now days by most of the hotels.
- Cleaning agents are recycled in other hotel areas for cleaning purpose.
- Other bathroom amenities like dental kits, shaving kits, loofah pads and shower caps are reduced and are placed as special amenities.

**Analysis of Benefits of Waste Management to the Hotel Organization:**

Figure 1 represents the benefits of waste management to the hotels

- It is observed that hotels follow waste management to gain benefits like awards, recognition by the society and green certification.
- Very few monetary benefits are observed in waste management program followed by the hotels.

**Analysis of Challenges Faced by the Hotels in Implementing Waste Management**

Figure-2 represents the challenges faced by the hotels in implementing the waste management program

- Attitude of the hotel employees in practicing the waste management and the awareness about the same are the most challenging issue for the hotels.

**SUGGESTIONS & RECOMMENDATIONS**

Hotels can adapt to various activities and initiatives to strengthen the effective disposal and management of huge amount of solid waste generated as a result of housekeeping activities. Some suggestive measures are summarized as below:

1. The hotel should place prominent signage for recycling in the guest rooms.
2. Old blankets and worn out furniture should be donated by the hotels.
3. Old mattresses can be remanufactured.
4. Linen and carpet can be re-dyed to match the room decor after refurbishment.
5. Rotation of draperies should be done periodically to increase the life span of the fabric.
6. Hotels can implement paperless feedback system.
7. Housekeeping cleaning supplies and chemicals can be purchased in concentrated form and can be multi-purpose.
8. Housekeeping should consider purchasing paper products like guest room stationery, tissue papers etc. made from recycle paper.
9. Hotels should effectively publicize its best practice of waste reduction.
10. Hotel housekeeping department should provide laundry bags made of jute/linen instead of paper bags.
11. Guest room amenities like newspapers, shower caps, shoe shine, sewing kits can be provided on guest request.

12. Materials should be purchased with minimal or re-useable packing.

## CONCLUSION

Hotels in Pune should adopt effective waste Management programs which have a great impact on environment. They should strive for sustainable practices as it is the need of the hour.

The mindset of the employees needs to be changed through conscious effort and constant training to make them understand the value of their contribution towards sustainability.

The hotel which acts in a responsible manner will only be able to sustain in the long run; by creating goodwill and efficient use of resources.

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