EVENT WASTE MANAGEMENT: EXTENT OF AWARENESS, PRACTICES ADOPTED BY EVENT ORGANIZERS AND BARRIERS FACED

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EVENT WASTE MANAGEMENT: EXTENT OF AWARENESS, PRACTICES ADOPTED BY EVENT ORGANIZERS AND BARRIERS FACED

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By

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DEDICATED TO MY

NEPHEW AND NIECE

HABIL H. CHOTHIYAWALA

AND

ZAHRA Z. BOOKBINDER

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This is to certify that **Ms. Zainab Chothiyawala's** study titled, **Event Waste Management : Extent of Awareness, Practices adopted by Event Organizers and Barriers Faced** has been approved by the Institutional Ethics Committee for Human Research (IECHR), Faculty of Family and Community Science, The Maharaja Sayajirao University of Baroda. The study has been allotted the ethical approval number **IECHR/FCSc/M.Sc./2022/02.**

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CERTIFICATE

This is to certify that the thesis entitled **"EVENT WASTE MANAGEMENT: EXTENT OF AWARENESS, PRACTICES ADOPTED BY EVENT ORGANISERS AND BARRIERS FACED"** submitted for partial fulfilment of the requirement for the Degree of Masters in the Faculty of Family and Community Sciences (Family and Community Resource Management) to The Maharaja Sayajirao University of Baroda, carried out by Ms. Zainab Chothiyawala, is her original bonafide work.

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CHAPTER I

INTRODUCTION

Waste Management is a serious agenda that needs general public awareness and administrative attention along with the guidance on a priority basis. There is a significant benefit of recycling, reducing & reusing. It prevents valuable things from being landfilled and hence saves energy and natural resource. Recycling is the practice that refers to the assortment and restoring of waste materials. It is the process where the resources from which the things are made can be recycled in new items. At the moment, there are adverse and unsupervised waste management practices adopted in hotel industry. Waste product is not anything that could be discarded and disposed off anywhere and anytime (Rawal, 2021).

1.1 Events

Events are an integral and an indispensable element of human life. Event management is basically an activity or service. Hence, the way the service is being rendered is of utmost importance. The activities concerned with managing an event need to be carried out in an orderly or systematic manner (Roy, 2017).

Bowdin et al. (2006) states that,

> "Events vary in their size and impact, with terms such as special events, mega events, hallmark events and major events used to describe and categories them internationally. Events are also categorized according to their type or sector, such as public/ private, government, association, culture, festivals, sporting, music related, tourism and business/ corporate events".

According to Shone and Parry (2004),

> “Phenomenon arising from those non-routine occasions which have leisure, cultural personal or organizational objectives set apart from the normal activity of daily life, whose purpose is to enlighten,

> celebrate, entertain or challenge the experience of a group of people"

"Events are certain functions within society with the purpose of sharing rituals and celebrations and affirm identities with other people. Also, events have played a significant role in reflecting nation's culture and contributing to economic development". Through events, generally, social and cultural needs are fully acknowledged and economic benefits are generated as well because such events will draw attention to different visitors from different countries, local people, etc. (Raj et al., 2009).

Characteristics of Events

According to Shone and Parry (2004) and Singh (2016), an event plays an important role in ones life. The authors identified following characteristic of an event which are, uniqueness, perishability, labor-intensiveness, fix timescales, intangibility and personal interaction and ritual or ceremony.

Uniqueness: The event has to be unique and different in order to be remembered. Recalling and remembering of an event are the signs of a good event.

Intangibility/tangibility: Intangibility of events is related to mental values, whereas tangibility refers to something that can be seen or touched. These make the event tangible even the give-away gifts works, as a token which is a remembrance that whenever seen, viewed as a reminder of the event. Event organizers should make the event tangible by boosting up the tangibility of events.

Rituals and ceremony: Ritual and ceremony emphasize the continuity of tradition. The tradition has remained and become a ritual more glamorous, more exciting more thrilling and an event looked forward to every year.

Ambience and services: Ambience is regarded as one of the most important and decisive characteristics to the outcome. Event gains a huge

success or is considered a big failure depends on ambience. Ambience refers to the surrounding participants catering services.

Personal and interaction: Events are gatherings of people where personal contact and interaction are inevitable. A room decorated for a party may look nice, but will not come to life until it is full of guests. Therefore, in considering making an event successful, event managers must be fully aware that is largely dependent on the actions and reactions of people attending.

Time scale: A fix-time scale can create a sense of organization and sense of achievement if the time scales in thoroughly planned for the event. Many events are actually composed of a sequence of short bursts of activity, with pauses or breaks in between. Constant ceremony lasting many hours might become dull and tiring.

Labor-intensiveness: Entire family members play an important role in organizing a good event as well as helping the event to reach its objectives. The level of labor intensiveness depends on the complexity of an event along with the uniqueness of the event.

Hence, it can be concluded that a successful event must be unique and memorable, have a tangible aspect such as giveaway gifts, incorporate rituals and ceremonies to emphasize tradition, should create a suitable ambience and provide quality services, prioritize personal interaction, adhere to a well-planned time scale, and require labor-intensive efforts from organizers and participants.

1.2 Waste

Waste also known as rubbish, trash, refuse, garbage, junk, litter, is unwanted or useless materials. In biology, waste is any of the many unwanted substances or toxins that are expelled from living organisms; such as urea, sweat or feces. Litter is waste which has been disposed of improperly (Robert, 2011). The varied nature and the complex composition of waste pose a major challenge on its definition (Williams, 1995). The European Union Waste Directive describes waste as ‘any

substance or object which the holder discards' (Directive, 2008), thus interpreting waste as something invaluable to people. Waste is unused material produced as a result of inefficient production and/or consumption practices and puts economic and environmental costs on society through its collection, treatment and disposal (Sarkis and Dijkshoorn, 2005).

Waste is directly linked to human development, both technologically and socially. The compositions of different wastes have varied over time and location, with industrial development and innovation being directly linked to waste materials. Some components of waste have economic value and can be recycled (Robert, 2011).

Food waste is "any food that is not consumed by humans and can be generated at any level within the food chain" (Okazaki et al., 2008). Food waste is defined as any food discarded as part of operations in the hospitality sector. This could be packaged food that is thrown away as it has passed its expiration date, food preparation/processing wastes, and waste from serving dishes and guests' plates. Food waste can further be divided into avoidable (food that was edible before it was thrown away), possibly avoidable (food that is eaten by some but not by others, or a single type of food that may or may not be waste depending on how it was prepared) and unavoidable waste. The avoidable and possibly unavoidable waste may therefore be considered to be edible (Parfitt et al., 2010).

Human generates more amount of waste in an event as compared to the normal waste generation. Traditionally, this harmed the environment as the waste generated from the events was send to landfills, composting, recycling and incineration but now a days new methods of disposing the waste is done by Biological Reprocessing, dumping in sanitary landfill, waste to energy, thermal treatment etc.

1.3 Types of Waste

Some of the common types of waste that are generated in events are solid waste, liquid waste, plastic waste, glass waste, metal waste, paper

waste, flower waste, decoration waste, food waste, bulky waste etc. Waste is sometimes a subjective concept, because items that some people discard may have value to others. It is widely recognized that waste materials are a valuable resource, whilst there is debate as to how this value is best

There are mainly two types of waste Biodegradable and Non-biodegradable waste. They are described as follows:

Biodegradable waste: The waste generated in kitchen, such as food scraps and garden waste, is commonly referred to as biodegradable waste or wet waste. This type of waste can be transformed into nutrient-rich manure through the process of composting. The length of time it takes for biodegradable waste to decompose varies depending on the material. Through various methods, biodegradable waste can be broken down and converted into organic matter.

Non-biodegradable waste: Waste materials like old newspapers, broken glass piece and plastic falls under the category of non-biodegradable waste, also known as dry waste. Unlike biodegradable waste, dry waste can be recycled and repurposed. However, non-biodegradable waste does not decompose naturally and remains a significant source of pollution.

Hence, it can be concluded that it is important to separate waste into biodegradable and non-biodegradable categories. While biodegradable waste can be transformed into nutrient-rich manure through composting, non-biodegradable waste can be recycled and repurposed. It is crucial to properly dispose of both types of waste to minimize their negative impact on the environment.

1.4 Waste Management

Waste management is the collection, transport, processing, recycling or disposal, and monitoring of waste materials. The term usually relates to materials produced by human activity, and is generally undertaken to

reduce their effect on health, the environment or aesthetics (Robert, 2011). The benefits of waste management are improved efficiency, lower treatment cost, conservation of raw material and energy, better access to finance, market requirements, improved environment, and better compliance with environmental regulations, working environment, and public image (Naidu, 2008).

According to Naidu, (2008) Waste management involves managing all types of wastes such as solid waste, liquid waste or gaseous substances with different methods. Waste management practices also differ for developed and developing nations. Waste management for non-hazardous residential and institutional waste in metropolitan areas is usually the responsibility of local government authorities, while management of hazardous and non-hazardous commercial and industrial waste is usually the responsibility of the waste generator or the concerned industries.

A typical waste management system comprises collection, transportation, pre-treatment, processing, and final abatement of residues. The purpose of waste management is to provide sanitary living conditions to reduce the amount of matter that enters or leaves the society and encourage the reuse of matter within the society (Kan, 2009).

1.5 Methods of Waste Management

Waste management plays a major role in minimizing the cost of managing and enhancing the overall profitability. It leads to the righteous methods of dealing waste materials, maintenance of Garbage transport trucks as per the environmental policy. The waste management procedures include e.g. recycling, waste reduction, environmental policy, waste prevention ideas, segregation. Waste management in the Hotel Industry is an absolute necessity for the drawn out maintainability and benefit of the Hospitality business (Rawal, 2021).

The Benefit of Waste Management is to reduce environmental impacts by reducing the toxicity and volume of waste, there is a scope for reducing the toxicity and volume of air, soil and water pollutants. By reducing the

amount of waste that has to be collected and treated as hazardous or infections waste materials (Kathy et al., 2001).

The most important **approaches** that are followed in waste management are as follows:

Sanitary Landfill method: It is the most popular method of waste management. This is the most prominent strong waste processing technology and strategy utilized today. The waste is primarily stretched out in slim layers, compressed and protected with soil or plastic lather. Current landfills are composed such that the base of the landfill is secured with an impenetrable liner that is in general made from Geosynthetic layers of wide plastic and soil. This shields the groundwater from being polluted considering draining or permeation. The landfill portion is filled with all the waste materials to the top and covered properly to avoid drainage of water (Ong et al., 2017).

Incineration method: This technique providing heat to the heap of wastes with high temperature under closed environments so that the wastes get burned without releasing polluted gases and substances to the outside surroundings when the procedure of smoldering of solid wastes takes places. The best thing about this technique is that by the application of smoldering process it lessens the volume of waste production gets reduced by 20% or 30% of the actual volume of wastes (Ong et al., 2017).

Recovery and Recycling method: The recycling process involves the re-usage of the discarded waste which is being disposed of as wasteful items. It includes the separation of any possible useful item for the heap of waste and then cleans it up for sending it further for the recycling purpose (Singh et al., 2018). The procedure leads to the reduction of power loss, less utilizing new resources and a considerable decrease in the areas of expansion of landfills.

Composting method: The solid waste material is specified as bio-degradable material and then allowed to decompose in a pit which is

specially made for the decomposing procedure to take place. When there is the absence of satisfactory space for landfills which are generally utilized to decompose biodegradable waste. In this case, only those substances which can be decomposed naturally and are regarded as biodegradable are used by decomposing the waste into the particular pits which after some time gets turned into natural manure which can be used for the farming process by the agriculturists or farmers or planters (Yadav et al., 2016).

Pyrolysis method: In this method, the solid waste is chemically decomposed into small fragments with the help of high heat which is given to the collected heap of waste materials in controlled environments in absence of oxygen. The procedure is carried out under immense pressure and at high temperatures of about to 430 degrees Celsius (Yadav et al., 2016).

Waste management as it is generally understood includes all the activities and actions required to manage waste from its generation to its final disposal. The main waste management activities are collection, transport, treatment and disposal of waste together with monitoring and regulation. Waste may be solid, liquid, or gas and each have different methods of disposal and management. Waste management normally intended to reduce adverse effects of waste on health and the environment. Waste management is one of the important measures of human hygiene (ASSOCHAM, 2015).

1.6 Barriers to Waste Management

According to Naidu (2008), there are number of barriers that can hinder the implementation of waste management in an organization as well as at individual level. They are information barriers, economic barriers, regulatory barriers, technological barriers, and organizational or corporate barriers.

Information Barriers: It includes lack of knowledge and awareness about waste management programs, cleaner technologies, and safe

substitutes, markets for waste products, Government regulations and policies.

Economic Barriers: This includes the cost of purchasing, maintaining and operating waste management equipment. Many of the small-scale-industries cannot afford this additional cost and hence rely upon low cost waste disposal.

Regulatory Barriers: It includes a multiplicity of laws and regulations dealing with waste management enforced by the authority, and any noncompliance will result in the closure of the industry.

Technological Barriers: This includes the unsuitability of foreign technologies in the home country and technologies for recycling a specific waste stream not available. Many of the industries in developing countries still consider using waste management technology as risky because the waste management programmes are still in their infancy.

Corporate Barriers: This includes resistance within the organization to proceed with any waste management like lack of environmental awareness, bureaucracy, scarcity of trained professionals, unskilled workforce, restrictive employment practices, lack of space for additional waste management equipment, and poor commitment of management and employee involvement.

Hence, it can be concluded that effective waste management is essential for preserving the environment and ensuring sustainable development. However, there were many barriers faced by the event organizers in adopting waste practices such as lack of knowledge, funds, interest e.t.c. By investing in education and training, providing financial incentives, streamlining regulations and environmental responsibility within organizations, we can overcome these barriers and create more sustainable future.

1.7 Justification

Waste is harmful to the environment as well as to the human health. There is a need to protect and conserve the environment. Here the role of event organizers is becoming important. Today, people are becoming conscious in protecting environment and adopting certain strategies to help and conserve the environment. To organize an event various things are needed like water, food, bottles, cans, decoration materials, flowers, sitting arrangements and so on. They also generate different kind of wastes like solid waste, food waste, water waste, plastic waste, paper waste etc. Hence, the present study aims to ascertain the types of waste generated after the events. As the accomplishment of any waste management strategy depends almost on the awareness and support of the organizer. Therefore, an attempt was made to assess the extent of awareness of event organizers about the waste management. The waste if not managed or disposed properly leads to serious environmental issues and health problems. Hence, the study aims to find out the waste management practices adopted by event organizers. The poor waste management practices may be due to some barriers. Therefore, it was thought necessary to find out the barriers faced by event organizers in waste management. Here, the educational tool can play crucial and significant role in creating awareness among various target groups. Therefore, the present study attempts to develop an audio-visual aid for suggesting methods of waste management.

Waste not only harms the environment but also poses a threat to human health.

Protecting and conserving the environment has become increasingly important, particularly for event organizers who play a crucial role in managing waste generated after events. From water and food to decoration materials and seating arrangements, events generate a range of wastes including solid waste, food waste, water waste, plastic waste and paper waste. To effectively manage waste, it is essential to raise

awareness regarding waste management options available nearby and obtain support from them.

Several studies have been conducted in the areas related to “Waste Management” (Filimonau, 2021), “Event Waste Management” (Kugbonu et al., 2018), “Solid Waste” (Radwan et al., 2010; Katususiimeh and Mol, 2011; Radwan et al.,2012; Pirani and Arafat, 2014), “Municipal Solid Waste” (Rafiee, et al., 2018), “Food Waste Management” (Pirani and Arafat, 2015; Pinto, et al., 2018; Rios, et al., 2018; Filimonau and Coteau, 2019; Rios et al., 2020), “Plastic Waste” (Bianchini and Rossi, 2021), “ Event Management” (Getz, 2022), “Flower Waste” (sharma et al., 2018; Kumar v. et al., 2020). Areas of related researches conducted in the Department of Family and Community resource Management are “Environmental Friendly Practices of Hotel Managers by Jadia (2014) and “Event Management by Homemakers” by Saini (2017). Hence, the researches focusing on types of waste generated after events organized at commercial or residential level were rare to found. Also, there were very few researches related to awareness and practices followed regarding waste management by event organizers. Although this genre appeared very interesting and there was dearth of researches found in India related to management of waste generated after events.

Courses such as “Ecology and Environment” and “Event Management” are the areas of field of Family and Community Resource Management. Hence, the information gathered through the present research would widen the data base and will help in making modifications in curriculum, if needed. The focus of study is to create an audio-visual aid that can benefit event organizers, both in present and future. The study aims to encourage conscious efforts to effectively manage waste. The audio visual aid highlights various methods for recycling and decomposing waste, which can help mitigate the negative impact of waste on the environment.

1.8 Statement of Problem

The present study aims to ascertain the extent of awareness of event organizers regarding waste management, their waste management practices and barriers faced.

1.9 Objectives

1. To ascertain the type of waste generated after the events.
2. To assess the extent of awareness of the event organizers regarding waste management.
3. To find out the waste management practices adopted by the event organizers.
4. To find out the extent of barriers faced in adopting waste management practices.
5. To develop audio visual aid suggesting methods of waste management.

1.10 Delimitations

1. The study was limited to events organized between November, 2022 to January, 2023.
2. The study was limited to events where gathering is more than or equal to 50 guest.

1.11 Hypotheses

1. There exist a relationship between extent of awareness of respondents regarding waste management and their selected personal and family variable.
2. There exist a relationship between waste management practices adopted by event organizers and their personal and family variables.
3. There exist a relationship between extent of barriers faced by event organizers in adopting waste management practices and their selected personal and family variable.
4. There exist a relationship between extent of awareness of respondents regarding waste management and waste management practices adopted by event organizers.

5. There exist a relationship between waste management practices adopted by event organizers and extent of barriers faced in adpting waste management practices.

CHAPTER II

REVIEW OF LITERATURE

For the present study, literature was thoroughly reviewed to gain insight into the topic of the study. To be familiar with the subject matter concerned with the present research problem, a survey of the literature was undertaken. To provide a clear and better understanding of the literature reviewed for the present study, the chapter was presented under the following subheadings:

2.1 Theoretical orientation

2.1.1 Events and Event Management

2.1.2 Types of Events

2.1.3 Waste from Events

2.1.4 Waste Management

2.1.4.1 Techniques of Waste Management

2.1.4.2 The Benefits of Waste Management

2.1.5 Barriers to Waste Management

2.1.6 Audio- Visual Aid

2.2 Related Researches

2.2.1 Researchers conducted outside India

2.2.2 Researchers conducted within India

Conclusion

2.1 Theoretical Orientation

Theoretical orientation is the section that describes the theoretical content related to the topic of study.

2.1.1 Events and Event Management

"Event is defined as something that takes place, or an occurrence. Events are an organized business. It means putting all three points from the meaning of an event together." Marketing guru, Philip Kotler, defines "Event as occurrences designed to communicate particular messages to target audiences" (Singh 2016).

According to Goldblatt (2005),

> “Events are unique moment in time celebrated with ceremony and ritual to satisfy specific needs”.

According to Argan (2007),

> "The term event is used for describing different activities designed for different purposes. These activities can be art, sports, tourism and social activities and can also be activities organized by giant organizers more professional and more formal.

Hinich (2008) defines event management as:

> "Event management process that provides an organization with the ability to detect Events, understand them and then decide on an appropriate control activity or action to prevent an incident and or service interruption. Appropriate activities or actions can include an action to dismiss an event or to record an incident. Efficient service operations rely on the timely handling of the many activities required to prevent incidents and service outages".

According to Raj et al., (2009),

> "Event management is the capability and control of the process of purpose, people and place".

Events are factors that create the need for a systematic and accountable approach to the actual management of events. The event

management is all about people coming together to create, operate, and participate in an experience (Silvers, 2004). It is an activity that gathers the target group in time and room, a meeting where a message is communicated and happening is created (Eckerstein, 2002). The term event management is used for describing different activities designed for different purposes. Events are also organized for fun, work, launches, parties etc.

2.1.2 Types of Events

The world of events is an enormous one. It covers a wide variety of events both in terms of nature and purpose. As generally categorized, events could be either private or public events. Private events include birthdays, weddings, anniversaries, ritualistic events, personal achievements, etc. which are celebrated across the world in different scales and in different personal capacities. Apart from these are the public events which usually have either a higher gathering than the private ones. Unlike the private events, public events are open to the interested stakeholders. These typically involve political events, community celebrations, variety of government events, tourism events, religious festivals, book fairs, trade fairs, concerts, art and cultural events, conferences, sports events or any form of corporate events (Roy, 2017).

According to Mehndiratta (2009), "There are four types of events viz. leisure events, cultural events, organizational events and personal event" Homemaker organizes personal event, which are held at personal, family and the number of people attends the event is high. Personal events like birthday party get together, festival organization, anniversary, kitty party and engagements are organized by homemakers now a day. One of the underlying facts separating the types of events is also the number of people who take part in the event or are in some way involved".

Events are of different type which takes place at organizational levels as well as on household levels. In the present research, the researcher has considered two major types of events that are Informal events and formal events. According to Wagen and Carlos (2005) and Singh (2016) events are categorized under following:

Informal events: Informal events are those events which provides gathering of family and friends in order to celebrate a function. These type of events are categorized as follows:

- **Religious event**: Every religion has one or two or even more events. These events bring an entire sector together; where they meet each other and enjoy the events that happen during that time.
- **Birthday Party:** A birthday party is a celebration of the anniversary of the birth of the person who is being honoured. Birthday party includes a number of common rituals. The guests bring a gift for the honored person. Party locations are often decorated with colorful decorations, such as balloons and streamers e.t.c.
- **Surprise Event:** A surprise event is a party that is not made known beforehand to the person in whose honor it is being held. Surprise event are the most common kind of surprise party. At such parties, the guests arrive an hour or so before the honored person arrives: Often, a friend in the surprise will lead the honored person to the location of the party without letting him know anything. Evidence of a party, such as decorations and balloons, are not made visible from the exterior of the home, so that the honored person will suspect nothing.
- **Welcome Party:** A welcome party is held for the purpose of welcoming a newcomer, such as a new club member, a new employee or a family's new baby.
- **Cocktail Event:** A cocktail event is a party at which cocktails are served. It is sometimes called a cocktail reception. Guest who

attend a cocktail event may wear a cocktail dress**.** A cocktail hat is sometimes worn as a fashion statement.

- **Dinner Party:** A dinner party is a social gathering at which people eat food together, usually in the host's home.
- **Farewell party:** In many cultures, it is customary to throw a farewell party in honour of someone who is moving away or departing on a long trip sometimes called a bon voyage party Retirement parties for departing co-workers fall into this category.
- **Baby Showers Events:** A shower is a party whose primary purpose is to give gifts to the guest of honour, commonly a mother-to-be. Guests who attend are expected to bring a small gift, usually related to the upcoming life event, like having a baby.
- **New Year party:** A New year party is organized at the end of the year to celebrate the upcoming year.
- **Kitty party:** A party in which females gather at a place where they play games and can spend time together.
- **Anniversary party, Weddings, Funerals, Engagement party and Get together:** Weddings, anniversaries, divorces and funerals all provide opportunities for families to gather. Funerals are increasingly becoming big events with non-traditional coffins, speeches, and even entertainment.
- **Musical event:** The event includes Sangeet ceremony of a wedding where the family gathers and plays music and dance for bride and groom.

Formal Events: Formal events are those events which provides gathering at commercial level related to business with colleagues. These types of events are classified as below:

- **Meetings and Exhibitions:** The meetings and conventions industry is highly competitive. Many conventions attract thousands of people, whereas some meetings include only a handful of high-profile participants.

- **Product Launching:** When a new product is brought into market, hype, excitement has to be created around it. And the best way to do that would be to have an event. Events also become an opportunity for the customer to touch and feel the product. The consumer/customer experiences the product and once that happens, it is more than likely he/she will purchase the product.
- **Promotional events:** Promotional events tend to have high budgets and high profiles. Most frequently they involve product launches, often for computer hardware or software, perfume, alcohol, or motor cars. One such marketing activity dazzled attendees with its new launch motorbikes riding overhead on tightropes, with special effect lighting. The aim of promotional events is generally to differentiate the product from its competitors and to ensure that it is memorable. The audience for a promotional activity might be sales staff, such as travel agents, who would promote the tour to their clients or potential purchasers. The media are usually invited to these events so that both the impact and the risk are high.
- **Conferences and Seminars:** When a company gather its employees at one place to provide them information. Seminar or the conference that takes place for discussion or training purpose.
- **Annual Celebration:** A celebration taking place at the business/organization once a year at a particular time.

Hence, it can be concluded that informal events provide a wonderful opportunity for family and friends to come together and celebrate various occasions, such as religious events, birthdays, welcome parties and farewell parties among others. On the other hand, formal events cater to the commercial and business sector and include meetings, product launches, promotional events, conferences, seminars and annual celebrations. Each event has its own specific purpose and target

audience and it is crucial to plan and execute them successfully in order to achieve the desired results.

2.1.3 Waste from Events

According to Tchobanoglous and Kreith (2002) “wastes are discarded tangible products of human activities that are regarded as unwanted and useless”. Wastes generated from the events are general waste, paper waste, plastic waste, metal waste, food waste, liquid waste, floral waste and bulky waste. Waste from the hospitality industry consists of both wet (organic/biodegradable) and dry waste. The wet waste consists primarily of food waste (Wagh, 2008), which can account for more than 50% of the hospitality waste (Curry, 2012) and up to one third of all the food served within the hospitality sector (Marthinsen et al., 2012).

Rubbish or Refuse denotes any and all non-putrescible wastes both combustible as well as non-combustible and many contain cans, glass, porcelain, paper, cardboard, textiles, thermocol, rubber, plastic, scrap metals, wood, or ashes. Some of these materials if these are in good shape or condition, like glass bottles, cans of metal or plastic can be recovered, cleaned and recycled. Paper or cardboard can be recycled (Robert, 2011).

After any event organized at the household level, homemakers often find themselves grappling with a significant amount of waste generated from the festivities. This waste can come in the form of food scraps, plastic plates and cutlery, decorations, and other materials used during the event. While it may be tempting to dispose of this waste in a haphazard manner, it is crucial to dispose it in an environmentally responsible way. Homemakers can consider composting food waste, recycling plastic and paper materials, and donating or reusing decorations for future events. Proper waste management can help reduce the impact of household events on the environment and contribute to a more sustainable future.

2.1.4 Waste Management

Waste Management is a serious agenda that needs general public awareness and administrative attention along with the guidance on a priority basis. There is a significant benefit of recycling & reusing is that it prevents valuable things from being land filled and hence saves energy and natural resource (Rawal, 2021).

According to (Kan, 2009), A waste management concept includes the following goals:

1. Reduction of total amount of waste by reduction and recycling of refuse.
2. Recycling and re-introduction of suitable groups of substances into production cycles as secondary raw material or energy carrier.
3. Re-introduction of biological waste into the natural cycle.
4. Best-possible reduction of residual waste quantities, which are to be disposed on ‘‘suitable” landfills.
5. Flexible concept concerning fluctuations in waste quantities and the composition of domestic waste. New developments in the field of waste management must be included into the system.

Waste management has been highlighted as a major operational focus for event managers looking to incorporate more sustainable practices. Not only can managers ensure the impacts of events are lessened but that ‘‘the event itself can be used to promote a green message’’ (Laing and Frost, 2010). Waste management has thus become a key priority, referring to all the activities related to avoiding, reducing or recycling waste, throughout the production and consumption chain (Papargyropoulou et al., 2016).

Troschinetz & Mihelcic (2009) pointed out that some waste management methods are often preferred than others. For instance, reuse, recycling, composting and energy generation from incineration are often preferred to landfills. A reusing or recycling system of any

hotel will help in planning to control, make reserve funds in resource and cost of energy, just as lessening utilization of waste. Hotel garbage must be are appropriately treated by looking at the component and composition. Biodegradable waste products must be arranged for treating the composting cycle or bio gas plant (Rawal, 2021). Reuse was considered a significant way of preventing waste materials from entering the waste stream. Some hotel operators consider reusing durable items, like furniture, by selling them or giving them to charities. However, most hoteliers indicated that reuse was not a viable option in a hotel business for daily waste and was limited to specific materials, e.g. plastic bags and fluid soap (Radwan et al., 2010). Recycling is the practice that refers to the assortment and restoring of waste materials. It is the process where the resources from which the things are made can be recycled in new items (Rawal, 2021).

The practice of waste disposal at landfill sites is contrary to the fact that waste management practices have evolved from reduction of the environmental impacts of waste through the creation of landfill sites to resource recovery (Read, 2003).

Homemakers often generate a significant amount of household waste after events such as parties and family gatherings. This waste can include food waste, plastic packaging, paper plates and cups, decorations, and other disposable items. It is essential for homemakers to manage this waste properly to minimize its impact on the environment. One way to reduce household waste after events is to plan ahead and use reusable items such as cloth napkins, plates, and utensils instead of disposable ones. Leftover food can be stored in reusable containers and eaten later, donated to food banks or composted. Sorting the waste into recyclables and non-recyclables and disposing of them properly is another effective way to manage waste. Homemakers can also reduce waste by purchasing products with less packaging and opting for environmental friendly products such as biodegradable trash bags, compostable tableware and food containers. Composting organic waste is another excellent way to reduce

household waste, as it turns food scraps into valuable nutrients for plants and soil. By adopting sustainable practices and reducing household waste, homemakers can play an important role in promoting a healthier and more sustainable environment.

2.1.4.1 Techniques of waste management

A research conducted by Radwan et al., (2010) revealed that majority of small hotel owners/managers felt that waste minimization was not an accessible waste management option. Hoteliers were not aware of techniques for reducing waste. Not one of the hoteliers had considered green purchasing practices to cut or reduce waste at source. The small hotel owners/managers showed a range of very different attitudes towards recycling. A few of the hoteliers were recycling some of their hotel's waste stream using either private companies or illegally using domestic recycling banks.

The effective waste management strategies and techniques that are applied by most of the developed countries are provisions for a systematic system through which the solid waste could be managed in a properly organized manner right from generation to compilation and carrying, and lastly handling and discarding (Singh et al., 2018). Basically, the waste management technique depends upon the different local conditions, financial possibilities and other factors of the nation and so each country's waste management strategy and technique differs from other. Mostly the modern techniques of waste management process involves: identification of strong waste as an asset, fair and steady requirement of directions, more prominent accentuation on state-funded instruction and alertness, shared obligation and stewardship. Hotel garbage must be appropriately treated by looking at the component and composition. Biodegradable waste products must be arranged for treating the composting cycle or bio gas plant (Rawal, 2021).

Waste management in the hotel industry is an integral part of environment friendly operations. The recycling of linen and others

textiles can be recycled and used such as condemned bed-linens, towel, and curtains should be reused for making dusters, face clothes, swab clothes. Segregation of wet and dry garbage should be adopted for recycling, reusing and recovering waste. A sewage treatment plant is an effective way of recycling waste water generated in the hotel (Raghubalan and Raghubalan 2009). From the perspective of environmental sustainability, the improvement of food waste management practices of the hospitality sector should be a pivotal part of its overall green strategy (Pirani and Arafat, 2015).

Waste disposal mean removing and destroying or storing damaged used or other unwanted materials include packing waste (glass, paper, or plastic), domestic, commercial and agricultural. Disposal including dumping, burial landfill sites (Adogu et al., 2015).

The implementation of waste prevention, reduction techniques, recycle, reuse techniques, waste treatment techniques, waste disposal techniques, can significantly help in reducing the negative impact of waste on the environment. It is important for individuals and organizations to take responsibility for their waste and adopt sustainable waste management practices to ensure a cleaner and safer environment for future generations.

The Waste Management Hierarchy provides a model of the potential options for managing waste, namely, prevention, reduction, reuse, recycling, recovery and disposal (Waste Online, 2006). The model indicates an order of preference of actions to reduce and manage waste, presented diagrammatically in the form of a pyramid (UNEP, 1996).

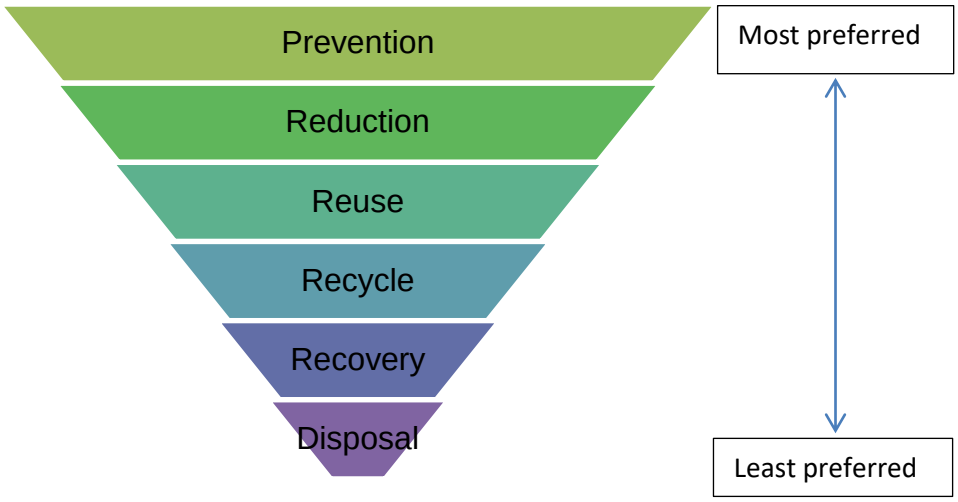


Figure 1: Waste management Hierarchy

Source: UNEO Green Economy Report 2011

According to UNEP (1996), Integrated waste management is an encompassing concept in which a framework is considered in an integrated manner which enables waste generators to utilize their waste streams more efficiently than just the disposal option. In recent years, the concept of integrated waste management is gaining prominence. The hierarchy structure gives top priority to preventing waste in the first place. When waste is created, it gives priority to preparing it for reuse, then recycling, then recovery, and last of all disposal (e.g. landfill). In many countries, informal sector contribute significantly to waste management and resource efficiency by collecting, sorting, trading and sometimes even processing waste materials. The informal sector comprises waste pickers, scrap collectors, traders and recyclers.

2.1.4.2 The Benefits of Waste Management

According to Kathy et al., (2001) there are many compelling reasons to manage waste more responsible in protection of environment and healthcare are discussed as below:

Reduce environmental impacts: Reducing the toxicity and volume of waste, there is a scope for reducing the toxicity and volume of air, soil and water pollutants.

Improve employee safety: By reducing the amount of waste that has to be collected and treated as hazardous or infections waste, there is a scope for reducing the risk of exposure to employee handling these materials. Through improved segregation and management of waste streams, and reduction in the number of potentially harmful materials present in the care environment the risk is reduced.

Decrease operating costs: It is conservatively estimated that operating costs can be reduced by up to 20.0 per cent by minimizing the volume of solid waste sent to landfills. This saving can be redirected to providing healthcare services.

Reducing the waste will not only save or protect the environment but it will also save the cost or reduces the expenses for waste disposal. Recycling and reusing waste benefit the soil from getting contaminated and reduced the operating costs.

2.1.5 Barriers to Waste Management

According to Wan et al., 2017, there are three major barriers to adopting green practices are lack of government legislation and enforcement, financial constraints and difficulties in balancing between the need for environmental management and the guests experience.

Many barriers, such as inadequate waste recovery and disposal methods are forming an obstacle to the development of waste to energy. The growth of the waste to energy sector was influenced by many political, economic and technological barriers, such as inadequate funds, the lack of regular national policies and legislation, as well as incomplete data collection and evaluation (Malav et al., 2020).

The major influences affecting waste management were categorized into four areas: social-cultural, technical, financial and organizational barriers. SWOT analysis shows both internal and external factors are playing a role in municipal solid waste management: There is good policy and a reasonably sufficient budget. (Yukalank et al., 2017).

Technical and Physical Barriers: A well-functioning waste management system allows residents to dispose of their waste in an appropriate manner. Components of a waste management system include the facilities and equipment used to temporarily store waste (collection bins) or transfer collected waste to its final disposal site (Klundert, 2001). A survey conducted by Yukalank et al., revealed that six waste management issues which express insufficient infrastructure, lack of waste collecting points, irregularity of waste collection, inadequate waste collection vehicles, limited access to waste bins, alternative to final waste disposal and improper waste separation facilities. Also physical challenges include large volume of waste and space limitations.

Organizational Barriers: Organizational barriers stand in the way of effective waste management. Four key organizational barriers to effective municipal solid waste management were identified by Yukalank et al., (2017) were lack of planning, lack of strategic direction and management, lack of training and poor communication.

Social-Cultural Barriers: Community participation and awareness are linked directly to municipal solid waste management problems. The literature suggests that encouraging people to participate will increase awareness, input and reception (USEPA, 2002). Here, socio-cultural barriers are those social and cultural factors that determine people's activities refer to lack of participation, poor co-operation and negative attitudes of residents.

Financial Barriers: To create a municipal solid waste management system it is necessary to consider financial factors. This refers to waste fees, including the public's ability and willingness to pay and the ability for the collection of fees by the municipality and it also refers to the public's attitude to the value of waste. There are three main financial barriers viz. waste management fees, the assumption that waste has no value and there is insufficient external funding (Yukalank et al., 2017).

Hence, it can be concluded that effective municipal solid waste management requires addressing technical, physical, organizational, socio-cultural and financial barriers. The provision of adequate infrastructure, training and communication, community participation and awareness financial support are key elements in developing a well-functioning waste management system. By working together, government agencies, private sector and communities can develop and implement effective waste management systems that protect the environment and promote public health.

2.1.6 Audio- Visual Aid

Teaching aids which affect organs of audibility and sight are called “Audio-Visual aids”. Naturally mind nerves receive knowledge from the auditory nerves. Action is the outcome of the seen objects and words heard. The five senses are gateways of knowledge. Hence it is rightly said that 85% of knowledge comes through seeing and hearing (Lankapalli, 2015). The term Audio-Visual Aid is any instructional gadgets through which a message can be heard and observed. An Audio-Visual aids envelop Motion picture projector, television, video technology, VCD player, Virtual classroom, Multi-media and various kinds of projectors (Parmar, 2019).

It is usually accepted and believed that the maximum learning can takes place when the greatest numbers of senses and organs are stimulated and activated. Use of devices/audio-visual aids can activate and stimulate and accelerate the greatest number of senses for acquiring the knowledge. Educators are most of the times unable to give students hands on or first-hand experiences and resort to the written and verbal use of terms (Lankapalli, 2015).

2.2 Related Researches

2.2.1 Researches conducted outside India

Katushiimeh and Mol (2011) conducted a research on “Environmental Legacies of Major Events: Solid Waste Management and the Common

wealth Heads of Government Meeting (CHOGM) in Uganda." This study investigated whether environmental improvements and especially those related to solid waste materialized during the 2007 commonwealth Head of Government meeting in Kampala, Uganda, and whether these improvements lasted well after that event. A Quantitative survey was used to investigate the state of solid waste management before, during, and after Commonwealth Heads of Government Meeting, measured through the perceptions of urban residents. Purposive sampling technique was used in order to verify that the respondents met the criteria for being a sample. Data collection took place through a structured and self-completion questionnaire, using five point Likert scale for the closed questions. Urban residents of Kampala were selected as samples. A total 500 respondents were randomly selected in the first round (March 2008), of which 454 respondents answered the questionnaire. In the second round (October 2008), 447 respondents were randomly selected and 410 questionnaires were returned. To ensure representativeness, stratified random sampling strategy was followed. Interviews and documents were used to interpret survey results. The result showed that before, during and one year after Commonwealth Heads of Government Meeting, statistical differences ($p<0.05$) was found between people's perception of solid waste management between areas close to the Commonwealth Heads of Government Meeting event location and areas far away from it. This means that solid waste management differs between areas close to Commonwealth Heads of Government Meeting and areas far away from Commonwealth Heads of Government Meeting. It was also noted that in some aspects of solid waste management, the disparity has increased to levels higher than it was before Commonwealth Heads of Government Meeting like street sweeping.

Radwan et al., (2012) conducted a study on "Solid Waste Management in Small Hotels: A Comparison of Green and Non-Green Small Hotels in Wales". The objectives of the study were to identify current solid waste management practices undertaken, to capture hoteliers' attitudes and

the barriers facing them in implementing various solid waste management strategies and to develop a best practice solid waste management model for them. A purposive sampling approach was chosen to select hoteliers who had experienced the phenomenon of Solid Waste Management in small hotels and were able to communicate their views without bias. A total of 18 semi-structured interviews were conducted with hoteliers running Green Dragon Environment Strategy and non-Green Dragon Environment Strategy hotels with fewer than 30 rooms in Wales, UK. The findings showed that many Green Dragon Environment Strategy small hotels were committed to addressing their environmental responsibility through three different actions viz. developing an environmental policy, undertaking an environmental audit and setting an improvement plan. Hoteliers targeted most of the sustainable options listed in the waste management hierarchy and apparently held positive attitudes towards them apart from in-house composting believing that it could cause vermin problems.

Pirani and Arafat (2015) undertook a study on “Reduction of Food Waste Generation in the Hospitality Industry”. The objectives of the study were to investigate how the amount of food waste is generated and how food operations can impact food waste production within the establishments, how it is varied at the different steps of the food service chain, and what factors contributed most significantly to these amounts. The survey of management staff of 45 hotels/restaurants was done. In this study, by hospitality sector, the establishments being referred to are the hotels, restaurants, and cafeterias which operate on a for-profit basis. Other organizations were also included such as the local waste management authority which, though not a part of the hospitality sector per se, influence the food waste management decisions made by the hospitality sector. Interviews were conducted with relevant stakeholders. These interviews shed light on the operations of 45 different hotels in the UAE as well as on the perspective of different authorities which influence food waste management operations in the hospitality sector, such as the Abu Dhabi Tourism and Cultural Authority (TCA Abu Dhabi)

and local charities. The hotel/organization representatives interviewed held various positions at their respective establishments such as head of engineering, EHS (Environment, Health & Safety) manager, food safety and hygiene manager, project manager, or executive chef. The quantification of food waste flows was accomplished as a result of two methods of data collection: the first method involved obtaining daily food waste data from the canteen at Masdar Institute of Science and Technology in Abu Dhabi, while the second method involved a Material Flow Analysis for the different events that was monitored at various hotel restaurants. With regards to the first method, the operation of the Masdar Institute canteen is outsourced by the Institute to a catering company which works on a for-profit basis. As a result of the waste restrictions recently imposed by the Centre of Waste Management in Abu Dhabi, many hotels are considering composting their food waste. Furthermore, it was found that those hotels which belong to chains that are based within the UAE are comfortable with donating their excess untouched food to the local charity. This was not true for those hotels which belonged to chains that had their headquarters outside the UAE. In addition, it was found that some of the factors which had the most significant effect on the amount of food waste generated at the different steps of the food service process were the show-up rate of guests at the event and the number of dishes being served at the event. The waste from serving dishes was found to be very significant for many of the events monitored, and so strategies which help minimize this type of waste need to be implemented, from both the perspective of hotel staff and the perspective of guests.

A research was undertaken by **Abdulredha et al., (2017)** on “The Development of Waste Management System in Kerbala during Major Pilgrimage Events: Determination of Solid waste Composition”. The aim of the study was to analyze the composition of solid waste during religious events. To achieve this goal of field investigation was conducted at a three temporary transfer stations, over 10 days, during one event in Kerbala, Bagdad. A total of 60 samples were collected

from three temporary transfer stations around event area, two samples per day from two randomly selected trucks. Sampling and data analysis were carried out based on the ASTM D5231-92 (2003) standard method. Sixty samples of unprocessed solid waste were collected and manually sorted into six different categories: organics, plastics, paper, metals, glass and miscellaneous wastes. The result showed that organic waste constitute the main waste category (57%) with paper, plastics and miscellaneous at 15%, 14.6% and 6.5%, respectively. The findings indicated that because of the high percentage of food waste, there exists a strong potential for energy generation or composting. In addition, plastics, papers, metals and glass have the potential to be separated and collected for recycling purposes.

A descriptive study was carried out by **Abdulredha et al., (2017)** on "Facing up to Waste: How can Hotel Managers in Kerbala, Iraq, help the City deal with its Waste Problem?" This study aimed to investigate hoteliers' knowledge and willingness to participate in waste sources separation and recycling schemes during major festivals, which represents a new contribution to the knowledge. To achieve this goal, a survey was conducted with 150 respondents during one major religious event, over 20 days in Kerbala, Bagdad. Interviews and questionnaires were employed to collect the data. Questions were designed to collect information about knowledge of the environment, willingness of the participant, preferred sorting alternatives and the actions that can motivate hoteliers and pilgrims to be involved in the program. The outcome of this research clearly indicated that the majority of respondents have poor environmental awareness. However, 68% of the respondents were willing to participate in the Water Source Separation program. The provision of recycling containers was identified as the highest priority to encourage waste separation.

Wan et al., (2017) carried out a study on "Environmental Awareness, Initiatives and Performance in the Hotel Industry of Macau". The purpose of the study was to examine the environmental awareness, initiatives and performance in the Macau hotel industry. A descriptive

research method was adopted involving surveys with 31 hotels in Macau and 11 face to face interviews with the hotel managers, facilities manager and engineers. Data were collected through questionnaire. All the hotels on the Macau Government Tourist Office list during the research period were invited to participate in the survey. The list had a total of 64 hotels (12 two star, 11 three star, 14 four star and 27 five star) and 32 guest houses. At the end, 31 questionnaires were returned. The result of the study showed that hotels in Macau have a high level of environmental awareness. Most hoteliers actively introduce initiatives that contribute to cost savings. Initiatives including using energy conservation, light bulbs, having an active system to detect/repair leaking facilities, and installing-water conserving fixtures are widely implemented; while programs involving using solar lawn light, recycling leftover food and reusing wastewater are not implemented. Major barriers for going green included lack of government regulations on environmental management (EM) financial constraints, the lack of employees to handle Environmental Management, and the fear that environmental initiatives may negatively impact the guest's experience, especially those VIP and hardcore gamblers and customers who expect enjoying the luxuries services in Macau hotels. Lower star hotels experience more difficulties in adopting green approaches.

Al-Aomar and Hussain (2017) carried out a study on “An Assessment of Green Practices in Hotel Supply Chain: A Study of UAE Hotels”. The objective of the study was to assess current green practices across hotel supply chain of UAE and providing insight and guidelines to both researchers and practitioners. An exploratory survey was designed and distributed to 50 UAE hotels selected by the researchers. The survey targeted only the 3, 4, and 5-star rated hotels. Only 30 filled survey were qualified based on completeness and content. In terms of results, the study found that the awareness of green practices was evident in UAE hotels where the majority (63%) have medium to high experience in such practices. Results also showed that the majority of surveyed hotels do understand the need and the value of adopting green practices. They

emphasize the value of reducing many types of waste in the hotel supply chain such as solid wastes, water, energy, emissions and green house gases. Recycling and reuse were found to be the most common green practices due to their direct link to waste and cost reduction. Hotels also emphasized the waste prevention as a key practice to support green management. Results also revealed that hotels still view sustainability as adhering to environmental standards and audits rather than the effective implementation of green practices to reduce wastes and conserve resources. Results also revealed that 5-star hotels have relatively better sustainability practices across the supply chain in terms of well-established systems and standards (including green practices).

Rafiee et al., (2018) carried out a study on “The Impact of Various Festivals and Events on Recycling Potential of Municipal Solid Waste in Tehran, Iran”. The objective of the study was to investigate the effects of different religious and non-religious events throughout the year in the mega city of Tehran, Iran, on recyclable fractions of Municipal Solid Waste. This study was conducted from November 2014 to November 2015 and was carried out in lines A and B of Aradkouh's processing units with a length of 55 and 50 m Information about the quantity of input waste was collected every day during the year. Line A has four rotating trammel screens (9 m in length and 2.5 m in diameter) with a bag opener system equipped by stainless steel blades inside them that open waste bags and mixing the wastes (EMS Turnkey Waste Recycling Solution, Tyrone, Northern Ireland). A Field survey was conducted using questionnaires in the studied processing facility and required data were collected. The investigated parameters include electricity savings, landfill space saving, recycled input credit process energy, recycled input credit transportation energy, net energy impacts, greenhouse gas benefits, and fuel saving. Results showed that polyethylene terephthalate and mixed plastics had been more affected by the events than other recyclable waste fractions. There is a net environmental benefit and energy savings from recycling during the studied events. Another important aspect of recycling collected waste

during the aforementioned events was the economic benefit. Selling recycled materials is an increasingly important component of the retail sector and commerce in general. Due to economic and environmental benefits of recyclable fractions of Municipal Solid Waste, improvement of the Municipal Solid Waste management system infrastructure is necessary to achieve maximum recycling benefits for these fractions after these important events.

Abdulredha et al., (2018) conducted a research on “Estimating Solid Waste Generation by Hospitality Industry During Major Festivals: A Qualification Model Based on Multiple Regressions”. The study investigated rate of production of Municipal Solid Waste from hotels in Kerbala during major festivals. The locale of the study was Kerbala, Bagdad. A total of 29 hotel managers were selected as the samples for the pilot study. A field questionnaire survey was conducted with 150 hotels during the Arba’een festival, one of the largest festivals in the world, attended by about 18 million participants, to identify how much Municipal Solid Waste is produced and what features of hotel impact on this. A simple random sampling technique was selected as the sampling approach. Hotel managers responded to questions regarding features of the hotel such as size(Hs), expenditure(Hex), area(Ha), and number of staff(Hst). An onsite audit indicated that Municipal Solid Waste produced from these hotels varies widely. In general, it was found that each hotel guest produces an estimated 0.89 kg of Municipal Solid Waste per day. The result revealed that higher ranked hotels have higher Municipal Solid Waste Generation rates than lower rated hotels, something attributed to the expenditure of the hotel and guest’s economic attribute and activities. The rates of Municipal Solid Waste Generation were found on which to be positively correlated with hotel size, expenditure and number of staff; the size of the hotel was the most influential factor on rate of MSW generation, while the staff size was the lowest.

Trang et al., (2018) carried out a study on “How do Green Attributes Elicit Pro-Environmental Behaviors in Guests? The Case of Green

Hotels in Vietnam". The study aimed to identify green hotel attributes and determinants that contribute to guests' intention generation for visiting a green hotel and practicing pro-environmental actions during their hotel stay. For data collection, convenience sampling technique was used to obtain data from 30 guests through questionnaire. Respondents were required to stay in green hotels that were certified at least at the third level of Green Lotus (from three Green Lotus to five Green Lotus), an eco-label of Vietnam's government, in order to ensure that those respondents had experienced and recognized environmentally friendly practices during their stay. This study collected primary data in four cities, which represent all parts of Vietnam: Ha Noi from the North, Da Nang from the Central and Highlands area, Ho Chi Minh from the South, and Can Tho from the Mekong Delta area. The result of the study showed five dimensions (customer benefit, energy efficiency, water efficiency, Recycling policy and Green characteristic) that underlie 24 green hotel attributes. Out of the five dimensions, Customer benefit, Energy efficiency and green characteristics are found to positively affect pro-environmental values and attitude that in turn enhance intention to practice environmentally friendly actions and visit a green hotel, while pro-environmental value does not trigger pro-environmental attitude.

Pinto et al., (2018) carried out a study on "A Simple Awareness Campaign to Promote Food Waste Reduction in a University Canteen". The objectives of the study were to analyze food waste behavior of the university students at the canteen, to evaluate whether simple poster messages and direct communication to raise awareness could help reduce plate waste at the canteen. Additionally, recycling behavior of the users was also monitored. The canteen did not operate during weekends and holidays and closes in August. Field work was performed by some of the students in the last year of the Environmental engineering degree class. Data collection was performed from noon until closure at 2:30 p.m. with the collaboration of the canteen staff before the start of the study, an initial visual observation of plate waste

was conducted during lunch time for 10 days. It was concluded that the users did not have strong convictions about avoiding food waste. During the second stage of the project an education campaign was implemented with plate waste being monitored for a further 16 days to assess the effectiveness of the campaign. The approach consisted of displaying simple and affordable informative posters in strategic areas of the canteen with simple messages reminding not to accept food they knew they would not eat. This led to a mean reduction in the waste consumption index of ~15%. A parallel action encouraging separation of organic and inorganic waste was implemented as well, with an active participation of >70% of the users. The initiative achieved its objective of reducing plate waste by raising awareness of the daily food waste problem at the institution's canteen.

A descriptive research was carried out by **Kugbonu et al., (2018)** on "Event Waste Management: A Study of a Religious Event in Ho". This study seeked to identify the stakeholders involved in managing waste at the cultural event (crusade) in Ho, to evaluate the equipment and facilities for waste management at the cultural event (crusade) in Ho and to assess the waste management strategies adopted to manage waste at the cultural event (crusade) in Ho. The study area was Ho, the capital city of the Volta Region of Ghana as well as the Ho Municipality. The data was collected using interview guide and direct observation. Some members of the waste management subcommittee of the central planning committee in addition to some ordinary event attendees were purposively engaged in a focus group discussion and an unstructured interview respectively. The sample size for the focus group and unstructured interviews was five in all both cases. The result of the study revealed that the committee awarded the management of waste at the crusade to a reputable waste management company, Zoomlion Ghana Ltd. However, church members and staff of the venue also helped in managing waste at the event. Notwithstanding, the capacity of the ZoomLion Volta region in relation to the number of mobile toilets and dustbins was inadequate for the number of attendees at the crusade.

This led to littering and people easing themselves on the premises. It was also concluded that event waste management was less satisfactory in the case of the Ho religious Crusade.

Rios et al., (2018) carried out a study on “Food Waste Management Innovations in the Food Service Industry”. The objectives of the study were identification of innovative food management practices that contribute to the avoidance (reducing and rethinking), reuse or recycling of food waste in food service establishments. Evaluation of food service managers perspectives regarding the benefits of various food waste innovations. The selection procedure was a mix of convenience sampling, as well as snowball sampling, i.e. where possible, respondents were asked to provide contact details of other food service providers and experts. A total of 110 semi-structured interviews were conducted in two rounds in 2015-2016. Data for the study was collected as part of larger cross-sectional research project of innovative practices in several food service and hospitality companies. The study thus draws upon a combination of qualitative data selected from semi-structured interview in Switzerland. The first round of interviews included 21 interviews with engineers and experts from public or private waste management companies, politicians and local authorities, food donation coordinators, experts in food services procurement and logistics, and sustainability. During the second round of interviews, food service professionals from 89 food service outlets across Switzerland identified innovations in waste management currently in use. Interviews included owners, managers and staff in independent companies, along with logistics, quality control and CSR specialists. Findings suggested that, irrespective of the type of establishment, the waste management chain in food services consists of five main steps: collection, sorting, storage, disposal (public or private), including transport of waste that is not collected by a public or private third party, but has to be brought to a waste sorting/recycling center. Findings also suggested that management teams within foodservice firms approach waste reduction from a practical, experience based approach, but there was no

systematic implementation of waste reduction strategies based on forms of institutional knowledge.

A descriptive research was carried out by **Yucedag et al., (2018)** on “Identifying and Assessing Environmental Awareness of Hotel and Restaurant Employees’ Attitudes in the Amasra District of Bartin”. The aim of the study was to determine the level of environmental awareness of hotel and restaurant employees in the Amasra District of Bartin, Turkey. Descriptive survey method was used to measure 16 items with a 5-point Likert scale. Data were obtained from 200 employees in the hotels and restaurants as of 2015. The data revealed that only 43% of hotels and 72% of restaurants in Amasra had recycling bins. Males and Bachelor's degree holders have more environmental awareness. Enterprises established after 2011 follow popular journals related to environment more than those before 2011. The results show that the legislation has resulted in general environmental awareness and that the organizations are willing to change their business processes and environmental strategies. Nevertheless, despite their actions, there is little awareness of the benefits that can result from cost reductions resulting from environmentally friendly practices. Those affected by their suppliers act to reduce waste but do not deploy formal environmental management systems or use environmental messages to market their goods or services.

Kim et al., (2019) carried a study on “The Effect on Green Human Resource Management on Hotel Employees’ Eco-Friendly Behavior and Environmental Performance”. This study examines how to improve employees’ eco-friendly behavior and hotels’ environmental performance through green human resource management. The data were collected from hotel employees with at least one year work experience in Phuket, Thailand. Only those hotels that were initiating green human resource management practices were invited for the survey. Out of 177 hotels, 14 hotels (6 green and 8 non-green hotels) were selected. These 14 hotels comprised of three luxuries, nine upper upscale, one upscale, and one midscale class. Half of the 14 hotels

were chains, and the other half were independent hotels. The number of employees ranged from 101 to 800 and was 412 on average, and the number of rooms ranged from 91 to 665 and was 330 on average. Online questionnaire was designed and distributed with Qualtrics, and the participated hotels distributed the universal resource-locator of the online questionnaire to hotel employees. From 14 hotels, 306 valid responses (138 employees at green hotels and 168 employees at non-green hotels) were received. To balance the sample size from non-green hotels with that of green hotels, the researchers additionally discarded 30 responses of non-green hotels by a simple random sampling technique. The researchers, consequently, employed 276 valid cases (138 employees at green hotels and 138 employees at non-green hotels) for further statistical analysis. According to the results from the combined sample, an anticipated, hotel employees' perception of green human resource management in their properties generally enhanced their commitment to their organizations, their eco-friendly behaviors, and the environmental performance of their properties. The two types of hotels have different results, Specifically, Green Human Resource Management of non-green hotels not only directly but also directly contributes to the achievement of a good pro-environment performance, while that of green hotels indirectly plays a part in having good environmental performance but only through the sequential mediating path of Employees Organizational Commitment and Employees Ecofriendly Behavior. Specifically, most green hotels have renovated their facilities to eco-friendly ones to meet the criteria of environmental certificates such as ISO 140001 and Green Seal. Therefore, the Hotel Environmental Performance of green hotels may be relatively less likely to directly rely on their Green Human Resource Management program because their well-established eco-friendly facilities and equipment can contribute to the enhancement of Hotel Environmental Performance. Unlike the green hotels, non-green hotels' physical environment often does not satisfy green standards.

Abdulredha et al., (2020) carried out a research on “Investigating Municipal Solid Waste Management System Performance during the Arba’een Event in the City of Kerbala, Iraq”. The aim of the study was to address the gap and contribute to new knowledge on municipal solid waste management at religious events by investigating and evaluating the municipal solid waste management system applied at the Arba’een event in Kerbala, one of the largest religious events in Iraq. Interviews were conducted to collect the data. Purposive sampling technique was used in the research. Field observations and in-depth interviews with nine senior managers from kerbala's municipalities were conducted during the event in 2016. The data was analyzed using thematic analysis and fed to the “Wasteaware” benchmark indicators framework to evaluate the performance of the events system. The result indicated that the system suffers from operational and governance weaknesses. Despite a focus of municipal solid was collection and transportation, the collection coverage was only 70%. There was no controlled landfill site in Kerbala. It was estimated that 5% of the event municipal solid waste was recycled by informal recyclers and there was no formal recycling scheme.

Abdulredha et al., (2020) carried out a study on “Estimating Municipal Solid Waste Generation from Service Processions during the Ashura Religious Event”. The study aimed to estimate waste generation from the service procession which was temporary. Tent was set up by Iraqis to provide accommodation and services to pilgrims, during such events. The locale of the study was Kerbala, Bagdad. A questionnaire was prepared for survey and an on-site municipal solid waste audit were conducted over 20 randomly selected processions during Ashura, which was one of the largest religious events in the city, being attended by up to 3.5 million pilgrims. The outcomes of this investigation indicated that municipal solid waste generation from processions broadly varied from 22 to 944 kg per day, with an average of 284 kg per day. This variation can be attributed to the number of meals provided by each procession and similar expenditures. The statistical analysis confirmed that

procession features greatly influence their Municipal Solid Waste generation. The rate of Municipal Solid Waste generation was found to be positively correlated with processions' expenditure and number of meals served, with number of meals being the most influential variable with regard to Municipal Solid Waste generation and expenditure the least.

A case study was undertaken by **Rios et al., (2020)** on “Sustainability-Oriented Innovations in Food Waste Management Technology”. The objective of the study was to explore the use of technological advancements in downstream value chain. The locale of the study was Basel, Switzerland. The study draws a single case study where the data collected by the Kitro team suggested that the methods are time consuming, inaccurate, costly and do not provide a holistic overview of the food thrown away. The collected material includes primary and secondary material both in interviews and data forms, and archival information about the background of the startup, its technological solutions, and its plans for future. Semi-structured interviews were carried out among employees of the Case Study Company and senior-level corporate managers and executives from foodservice companies that have agreed to acquire quantification solutions and business which have decided not to invest in these technological devices. According to data collected by the case company, efforts invested in food waste mitigation can quickly pay off and lead to cost savings of CHF 25,000-150,000 per year (depending on outlet size, type, etc).The interviewed top executives emphasize that achieving sustainable operations is a holistic project that has to involve the whole team. They indicated that consistent communication within cross-departmental team members is key to success. The sustain ability/marketing department should be just as involved in the process as the kitchen and service team to ensure that everyone plays their part. While the kitchen team focuses on analyzing the results and implementing changes in the kitchen, the service team will have to be briefed on what to tell customers in case portion sizes are smaller than before and if supplements can be

requested. The marketing team can then create visibility by publishing the results in a concise manner in order to increase awareness. All interviewed experts pointed out that quantification of food waste to detect operational inefficiencies and improve operations has proven to be a valid method to produce quick results. Interviews with senior executives from businesses that have decided not to invest in technological quantification solutions pointed out to potential resistance in market adoption as members of the kitchen team may be reluctant to take on waste control tasks.

2.2.2 Researches conducted within India

Robert (2011) conducted a study on “Total Waste Management in Hyderabad, Andhra Pradesh”. The objectives of the study were to know the meaning and analyze the problems of waste, to make a detailed study of E-waste, Municipal Solid waste, Bio-Medical waste and hazardous waste in Hyderabad city, to analyze the problems faced in the total waste management in Hyderabad, to assess the role of Pollution Control Board in solving the problems, to trace the different legislation on waste management and to give suggestions to improve the total waste management. Analytical and descriptive method was adopted in this study. The study was undertaken in an activity based manner to make a systematic collection of materials on waste management. The researcher had collected materials from the libraries of Osmania university library, Hyderabad, university of Madras, Chennai and other libraries. As a result, for the fraction of the wastes destined to this option, incineration should aim at delivering the highest possible efficiencies of energy recovery while preserving the optimum level of material recycling possible. Waste minimization, waste reduction and waste reuse needs to be attempted first to avoid waste accumulation.

Prabhu (2014) carried out a research on “Sustainable Solid Waste Management through Public Private Partnership”. The objectives of the study were to study and compare the various methods of Solid Waste

Management existing in different metropolitan cities of India and also to study and compare the various Public Private Partnership Models operative in Solid Waste Management in different cities of India, to study the Public Private Partnership Models & existing methods of Solid Waste Management with respect to efficiency parameters, to explore the level of public participation in Solid Waste Management and to propose a Sustainable Solid Waste Management program. A Mixed approach was used for this research. Structured interview, observation and questionnaire were the tools used. From the selected ten cities, 2 municipal officers were interviewed, in total 20 officers were interviewed and 100 residents/households were selected randomly from each city, the total sample size was 1000. Of the total 60% represented the urban area and 40% from the urban slum area. The findings revealed that overall in the ten cities similar methods were used for managing of Solid Waste. Waste was generated by different sectors and the municipal authority was solely responsible for the disposal of this enormous waste. Inspite of all odds the municipal authorities were doing their level best for the management of Solid Waste.

A descriptive research was conducted by **Jadia (2014)** on “Environment Friendly Practices followed by Hotel Industry: A Comparative study between Two Cities of Gujarat State”. The objectives of the study were to assess the extent of knowledge of the managers of the hotels regarding their environmental responsibilities, to assess the practices of the managers of the hotels in protecting the environment and to develop an educational package for the hotels in general for enhancing environment friendly practices. The sample size of the study consisted of 60 hotels, 30 each from Vadodara and Surat. The questionnaire was used as an instrument to gather the information from the respondents. It was concluded from the findings of the present study that majority of the respondents from Vadodara City as well as Surat City had high knowledge about water consumption, energy conservation and waste management. A significant relationship was found between extent

of the knowledge and practices followed by the respondents from Vadodara City.

Deshmukh (2015) conducted a study on "A Study of Solid Waste Management Practices Adopted by Selected Municipalties in Satara, Solapur and Kolhapur Districts". The objectives of the study were to study the present Solid Waste Management Practices of selected Municipalities in Satara, Solapur and Kolhapur Districts, to identify the major problems related to Solid Waste Management practices of the selected Municipalities, to identify the problems of stakeholders related to Solid Waste Management practices of selected municipalities, to study the performance of Solid Waste Management Practices in the selected municipalities, to study the planning and execution of logistics in Solid Waste Management of selected municipalities and to suggest feasible solutions for the effective implementation of Solid Waste Management practices. This research was both exploratory and descriptive in nature and the researcher adopted Survey Method to collect the required information from 26 municipalities. The study revealed that the respondents belonged to municipalities from Satara district faced higher public nuisance problems as compared to municipalities from Kolhapur district. It was concluded that the solid waste management in the selected municipalities was lacking in proper planning, the citizens used plastic containers for collection of the waste in their houses. At the most two small size containers were required for collection of the household waste. The citizens do not cover the waste containers in their houses. Separate containers were not maintained to collect the dry and wet waste, that selected municipalities of districts do not replace the public garbage bins regularly.

Descriptive research was conducted by **Saini (2017)** on "Event Management by Homemakers: A Study of Practices Adopted and Problems Faced". The objectives of the study were to find out the kinds of events organized by the homemakers, to study the event management practices followed by the homemakers, to ascertain the problems experienced by the homemakers in event management and to

develop guidelines for event management. The locale of the study was Vadodara city of Gujarat, India. The sample of the present study comprised of 120 homemakers from various areas of Vadodara city. The samples were chosen from different zones of Vadodara city through Purposive sampling method. For the present study the interview schedule was selected to get the detailed data about the respondents. It was found that for organizing and controlling, was done to a moderate extent. Statistically it was proved that educational level had effect on the extent of practices adopted and extent of problems faced by the homemakers. Computation of coefficient of correlation revealed that a significant relationship existed between the extent of practices adopted and extent of problems faced by the homemakers for event management.

A case study was undertaken by **Mistry (2018)** titled “A Case Study on Municipal Solid Waste Management Practice in State of Gujarat”. The objective of the study was to quantify the current Gujarat Scenario of waste management and recommend enhanced techniques for collection and transportation and disposal of waste which are to be utilized in the urban regions by examining the different factors which impact the solid waste management in Gujarat. The data were collected by interviewing people. Descriptive research design was used to collect information about the status of solid waste management in Gujarat. Simple random sampling method was selected to analyze the status of solid waste management in Gujarat with a sample size of 300 respondents. To know the major lag in the transport route system a critical survey with 20 factual questions was carried out and it showed that the inclusion of new advancements in vehicles & equipment to make the condition of its working more effectual is quite necessary. It was found that the improper functioning of solid waste management leads to the generation of several harmful diseases, detrimental to health and emission of carcinogenic and anthropogenic gases from the waste. The results showed that to elevate the social awareness and human behavior to get rid of waste is the most environmentally efficient way to manage

Municipal Solid Waste. More specifically, Gujarat would be much better served by having Urban Local Bodies Action Plans and implementing Zero Waste Concept to handle its unmanageable scattered waste scenario.

Conclusion

The review of literature collected, based on the objectives of the study gave an insight into type of waste generated after events. The concept of events and event management was also explored. The review of literature highlighted the techniques of waste management that can be adopted for effective management of waste. The barriers faced by event organizers in adopting waste management practices were also investigated from literature reviewed.

Based on empirical literature reviewed, it was evident that researches conducted outside India, mostly focused on areas related to “Sustainable event management”, “Solid waste management”, “Solid waste composition”, “Environmental awareness of hotel employees”, “Green practices in hotel”, “Recycling potential of Municipal solid waste”, “Waste generation by hospitality industry”, “Event waste management”, “Food waste management”, “Eco-friendly behavior and environmental performance of hotel”. However, the related researches carried out in India focused on “Total waste management”, “Sustainable solid waste management”, “Environment friendly practices of hotel employees”, and “Event management by homemakers”. Hence, there was dearth of researches focusing on awareness of event organizers regarding waste management, waste management practices adopted by them and barriers faced in waste management after events. Researcher has yet not come across the study on similar subject in India. Despite the fact that the genre appeared to be highly interesting, there was a paucity of researches on Event waste management and extent of awareness regarding waste management, waste management practices adopted by event organizers and extent of barriers faced in adopting waste management practices.

The results of the researches reviewed revealed that there were few researches conducted on hotel managers which were selected as the samples and the studies conducted on homemakers and event managers were rare to found. It was also discovered that the researches focused more on waste generated after religious events or hotel waste but researches pointing towards waste generate weddings, birthday parties e.t.c were uncommon.

CHAPTER III

METHDOLOGY

The research design, operational definition, sample, sampling technique, selection and description of tool, data collection and data analysis are explained briefly in this chapter. The main purpose of the study was to know types of waste generated after the events, extent of awareness of the event organizers regarding waste management, waste management practices adopted by the event organizers and extent of barriers faced by event organizers in adopting waste management practice. It also aims to develop audio visual aid for suggesting methods of waste management. For systematic presentation, this chapter was divided into the following sections:

3.1 Research Design

3.2 Variables and conceptual framework under study

3.3 Operational Definition

3.4 Locale of the study

3.5 Unit of Inquiry

3.6 Sampling Size and Sampling Procedure

3.7 Selection, Description and Development of the tool

3.8 Data Collection

3.9 Data Analysis

3.10 Development of Audio Visual Aid

3.1 Research Design

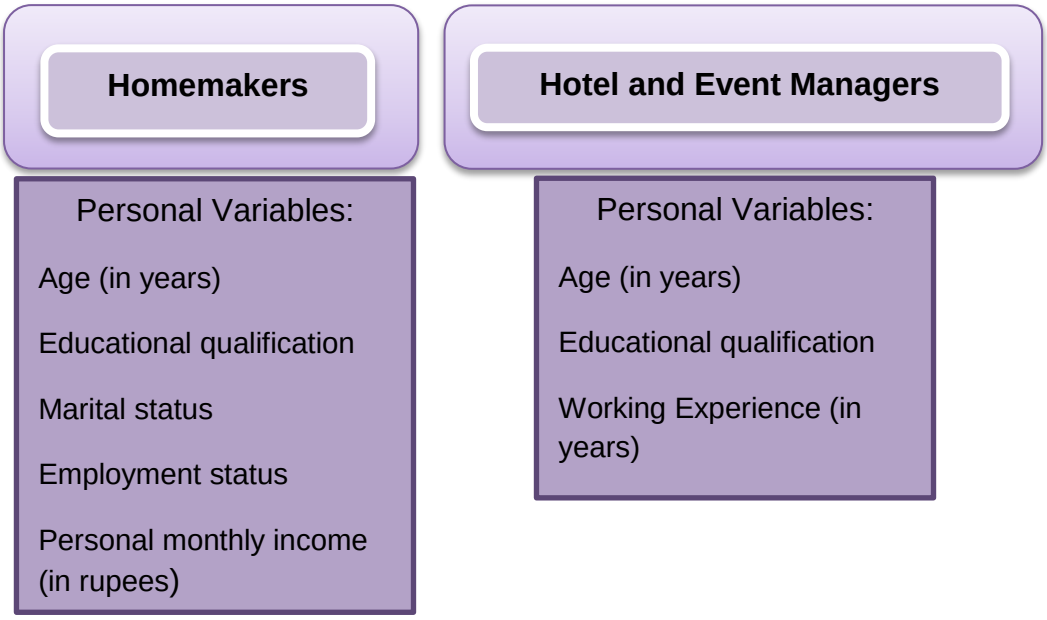
The present study had descriptive research design. The main purpose of descriptive research is explanation of the set of circumstances as it is present as such. Descriptive research design was thought to be most appropriate method to carry out the present research because it gathered the data on type of waste generated after the events, extent of awareness regarding waste management, waste management practices adopted by the event organizers and extent of barriers faced in waste management.

3.2 Variables and Conceptual framework under study

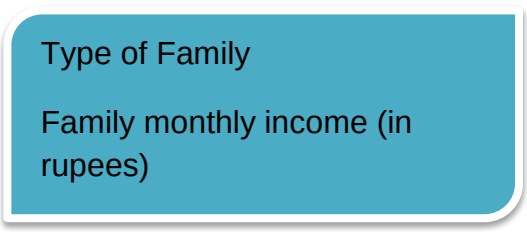
There were two sets of variables in the present research viz. Independent and Dependent variables.

3.2.1 Independent Variable: For the present study, the independent variables were as follows:

- **Personal Variables**



- **Family variables**



3.2.2 Dependent Variable: For the present study the dependent variable were as follows:

- Extent of awareness of event organizers regarding waste management
- Waste management practices adopted by event organizers
- Extent of barriers faced in waste management

3.2.3 Hypothetical Relationship between Variables: A schematic diagram showing hypothetical relationship between selected variables is presented below:

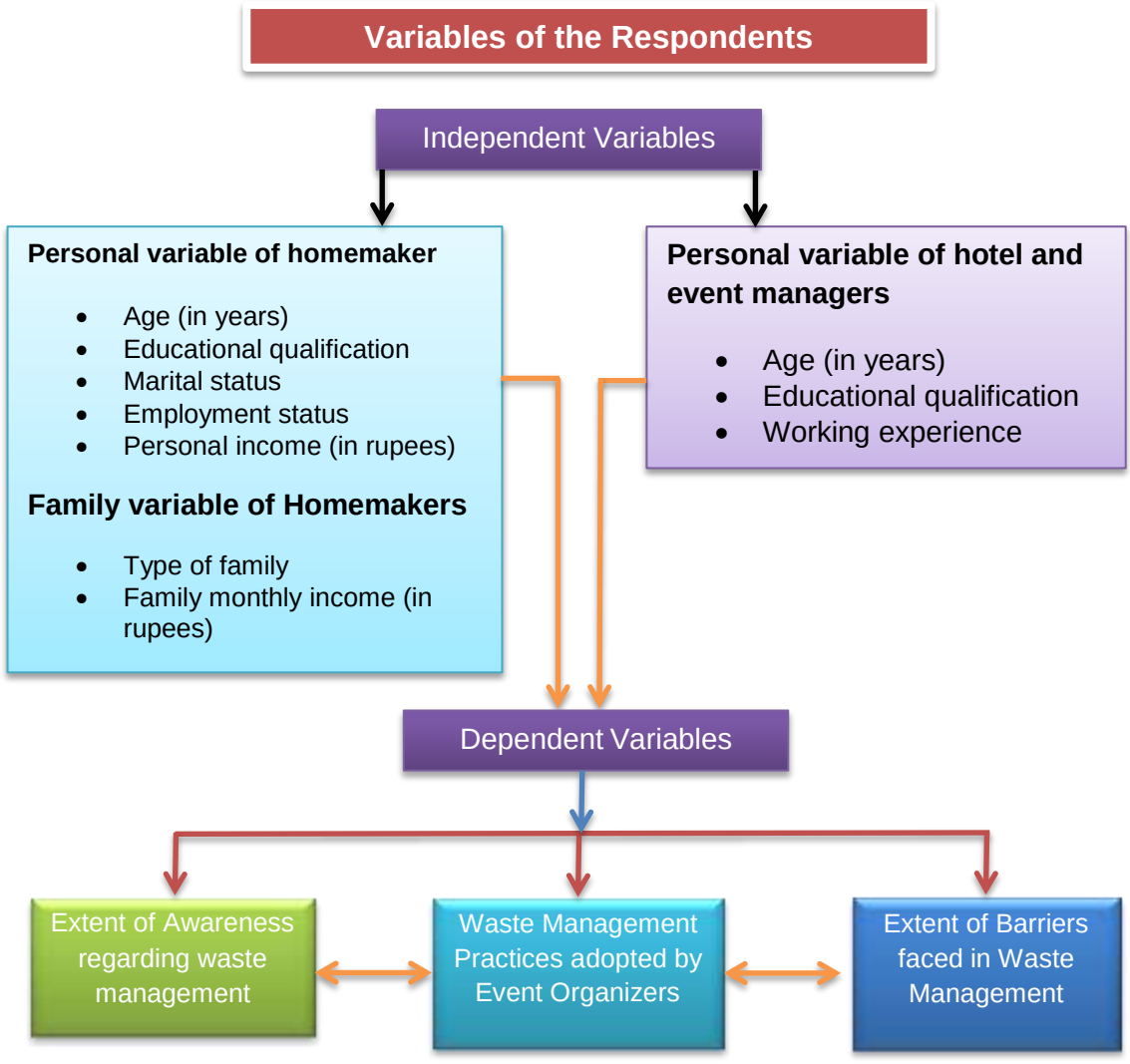


Figure 2: Schematic Framework to show Relationship among Variables under study

Explanation of Conceptual Framework

It was theorized that personal variables of homemakers such as age (in years), educational qualification, marital status, employment status, and personal monthly income (in rupees) and family variables such as type of family and family monthly income (in rupees) will have an influence on extent of awareness regarding waste management, waste management practices adopted by them and extent of barriers faced in waste management. It was theorized that Personal variables of hotel and event managers such as age (in years), educational qualification and working experience will have an influence on extent of awareness regarding waste management, waste management practices adopted by event organizer and extent of barriers faced in adopting waste management practices.

It was also theorized that extent of awareness of event organizers regarding waste management will have an influence on waste management practices adopted by them. It was also theorized that waste management practices adopted by event organizers will be influenced by extent of barriers faced in waste management.

3.3 Operational Definitions

The operational definitions thus constituted for the present research study are given below**:**

3.3.1 Event: For the present study, event was operationally defined as formal or informal gathering organized by an event organizer for more than or equals to 50 guests.

3.3.2 Waste: For the present study, waste was operationally defined as paper waste, plastic waste, food waste, flower waste, water waste, wood waste, metal waste, cloth waste, decorative waste, thermocol waste, glass waste and solid waste generated after the event.

3.3.3 Event Organizers: They are operationally defined as those who are involved in organization of events. For the present study, event

organizers were homemakers, managers appointed in hotels and event management companies.

3.3.4 Extent of Awareness regarding Waste Management: For the present study, it was operationally defined as the extent to which the respondents had awareness regarding waste management. It included four sub-sections namely prevention and minimization, reuse, recycle and recovery and disposal methods. There were total 22 statements, where 11 were positive statements and 11 were negative. This was assessed through summated rating scale having statements related to waste management. The respondents were asked to state whether they “Agree”, “Undecided” and “Disagree” which were scored 3 through 1 respectively to the positive statements. The scores were reversed in case of negative statements. Higher scores reflected high extent of awareness of event organizer regarding waste management.

3.3.5 Waste management practices: For the present study, waste management practices are operationally defined as methods such as segregation, recycling, reusing, preventing of waste, adopted by event organizers. Here, 21 statements were framed and assessed through summated rating scale where respondents were asked to state waste management practices adopted by them. It had 3 point continuum for the responses “Always”, “Sometimes” and “Never” which were scored 3 through 1 respectively. Higher scores were considered as good practices adopted by event organizer for waste management.

3.3.6 Extent of Barriers faced in adopting Waste Management Practices: For the present study, it was defined as the extent to which the event organizers faced barriers in adopting waste management methods. This was assessed through summated rating scale where they were asked to state the extent to which they face “Major Barrier”, “Minor Barrier” and “Not a Barrier”. The score ascribed were 3 through 1. Higher score revealed high extent of barriers faced in waste management.

3.4 Locale of the study

The locale of the study was Vadodara city, Gujarat, India. It is fastest growing cities in Gujarat which have around 80 event management Companies involved in organizing different events for guests.[1] There are around 150 hotels categorized under 3 star, 4 star and 5 star and are involved in organizing various events for their guests. [2]

3.5 Unit of Inquiry

The unit of inquiry were homemakers, hotel managers and event managers of Vadodara city.

3.6 Sampling Size and Sampling Procedure

3.6.1 Sample size: The total sample constituted of 120 event organizers from Vadodara city, where 40 homemakers, 40 hotel managers and 40 event managers were selected as sample for the study.

3.6.2 Sampling Procedure: A stratified Random sampling technique was used to select samples for the present study. The respondents were stratified into three main groups viz. homemakers, hotel managers and event managers. For selecting homemakers, few residential societies were identified. Through informal conversation, it was found that almost all of the homemakers of these residential societies organized events. Therefore, 40 homemakers were selected randomly from these residential societies. For selecting hotel and event managers, 40 hotel managers and 40 event managers were randomly selected from the list of existing hotels and event management companies in Vadodara city. The researcher approached these hotels and event management companies for seeking consent for collecting data.

3.6.3 Inclusion criteria

- The present study was limited to those respondents who are involved in organizing events.
- The respondents were those homemakers who organizes events for more than or equal to 50 guests at home.

- The respondents were those who are working at managerial level in the hotel and event management companies.

3.6.4 Exclusion criteria

- The present study excluded those respondents who were not involved in organizing events.
- Those homemakers were excluded who organizes small family event having less than 49 guests.
- Those respondents were excluded who were working at other departments in hotel and team members at event management companies.

3.7 Selection, Description and Development of the tools

3.7.1 Selection of the tool

In light of the objectives framed for the present study, interview schedule was developed. It was developed to collect information related to types of waste generated after the events, extent of awareness regarding waste management, waste management practices adopted by event organizers and extent of barriers faced in waste management.

Interview schedule: The interview schedule involves presentation of oral-verbal stimuli and reply in terms of oral-verbal responses. The interview schedule was thought best because of the following reasons:

- It is in-expensive than other methods as researcher themselves collected the data through face-to-face interview.
- It lead to more responses as the queries faced by the respondents were cleared out at the same time.
- It is free from biasness as misreading of questions was reduced through face-to-face interaction.

3.7.2 Development of the tool

Based on the information gathered through review of related literature, interview schedule was prepared. While preparing the tool, care was

taken to include all the questions that would elicit the information needed to attain the objectives of the study.

3.7.3 Description of the tool

The various sections of the tools developed for the study are described in detail as follows:

3.7.3.1 Interview schedule for event organizers

The interview schedule comprised of five sections which are described as below:

Section I Background Information and Organizational detail: This section contains personal, family variables and organizational details of the respondent viz. Age (in years), Educational qualification, Marital status, Employment status, Personal income (in rupees), Type of family, Family monthly income (in rupees) of the homemakers. The personal information viz., Age (in years), Educational qualification, Working experience of hotel managers and event managers were considered. The Organizational details such as Years of establishment of the hotel and event management company, Size of hotel, Star rating of the hotel, In-house waste disposal facility of hotels and events organized by event organizers were included.

Section II Types of waste generated after events: This section included the list of types of waste generally found after events. Types of waste were categorized as paper waste, plastic waste, food waste, flower waste, water waste, wood waste, metal waste and cloth waste.

Section III Extent of awareness of event organizers regarding waste management: This section contained 22 statements related to waste management in which, 11 statements were positive and 11 were negetive. The awareness of the event organizers were assessed in terms of “Prevention and Minimization”, “Reuse”, “Recycle and Recovery” and “Disposal methods”. The respondents were asked to state whether they “Agree”, “Undecided” and “Disagree”. For each

positive statement the scores assigned were given 3 through 1 respectively and for negative statements the scores were reversed. Higher scores reflected high extent of awareness of event organizer regarding waste management.

Section IV Waste management practices adopted by event organizers: This section contained 21 statements related to waste management practices. The waste management practices were based on segregation, composting, recycling, reusing and landfilling. This was reflected through summated rating scale where respondents were asked about the waste management practices adopted by them. It had 3 point continuum for the responses “Always”, “Sometimes” and “Never” which were scored 3 through 1 respectively. Higher scores reflected good practices adopted by event organizer for waste management.

Section V Extent of barriers faced in adopting waste management practices: This section contained 8 statements related to barriers faced in adopting waste management practices by event organizers. The barriers were lack of knowledge, funds, interest, manpower, space, time, equipment and government legislation and enforcement. The responses were “Major Barrier”, “Minor Barrier” and “Not a Barrier” where the score ascribed were 3 through 1. Higher scores reflected high extent of barriers faced in waste management.

3.7.4 Establishment of Content Validity of scales

There were 3 scales prepared by the researcher. They were (i) Extent of awareness of event organizers regarding waste management, (ii) Waste management practices adopted by event organizers and (iii) Extent of barriers faced in adopting waste management practices. The content validity of all the scales were established. For the purpose, scales were given to a panel of 8 judges, from Department of Family and Community Resource Management, Faculty of Family and Community Sciences. They were requested to check the clarity and relevance of the content for each scale. They were also requested to state whether each

statement fell in the category under which it was listed. A consensus of 80 % among the judges was taken as a yardstick for inclusion of the statement in the final tool. No changes were required to be made in the final tool.

3.7.5 Establishment of Reliability

The reliability was established for the scales extent of awareness of event organizers regarding waste management, waste management practices adopted by them and extent of barriers faced in adopting waste management practices through pretesting and reliability of the scales.

Pretesting: A pilot study was conducted to find out the types of events organized, type of waste generated after the events, extent of awareness of event organizers regarding waste management, waste management practices adopted by event organizers and extent of barriers faced in adopting waste management practices. Therefore, the developed scales were pretested on the sample of 30 respondents who were involved in organizing the events for more than or equals to 50 guests.

Reliability of the scales: The reliability of the scales was established through split-half methods. For split half method the scales were divided in two using odd and even method. The coefficient of correlation was found between the two halves. The Cronbach's alpha test has been applied on random 30 samples. The formula of Cronbach's alpha is as below:

$$\alpha = \frac{N * \bar{c}}{\bar{v} + (N-1) * \bar{c}}$$

Where, N is the number of items, $\bar{c}$ is the mean covariance between items and $\bar{v}$ is the mean item variance. The reliability values of awareness, waste management practices and barriers were found to be 0.389, 0.843 and 0.545 respectively. These scores reflects the high reliability of the tool.

3.8 Data Collection

The interview schedule was used for data collection. The purpose of research was explained and rapport was built to get the true responses. The researcher personally interviewed the event organizers by visiting them. Consent was taken from the event organizers. The data were collected only by those respondents who enthusiastically and willingly gave the needed information for the study. The period of data collection was from November, 2022 to January, 2023.

3.9 Data Analysis

The procedure that was used to analyze the data was categorization, coding, tabulation and statistical analysis.

3.9.1 Categorization

The following categories were made to enable researcher to analyze the data for further statistical application.

i. **Age (in years):** The obtained range of the age of the respondents at the time of data collection were categorized as follows:

Homemakers:

1) 25-42 years
2) 43-60 years
3) 61-78 years

Hotel managers:

1) 38-43 years
2) 44-48 years
3) 49-54 years

Event managers:

1) 26-33 years
2) 34-42 years
3) 43-50 years

ii. **Educational Qualification:** The formal education obtained by the respondents at the time of data collection and was categorized as follows:

Homemakers:

1) Below SSC (Below 10^{th} pass)
2) SSC (10^{th} pass)
3) HSC (12^{th} pass)
4) Diploma
5) Graduation
6) Post-Graduation

Hotel managers and Event managers:

1) Diploma
2) Graduation
3) Post-Graduation

iii. **Marital status:** It referred to marital status of the homemakers and was categorized as below:

1) Married
2) Unmarried
3) Divorced
4) Widow

iv. **Employment status:** It referred to the engagement of the respondents in monetary employment status of homemakers at the time of data collection and is categorized as below:

1) Employed
2) Not Employed

v. **Personal monthly income (in rupee):** It referred to monthly income of the homemaker acquired from various sources in duration of a month.

1) No income
2) ₹10,000-₹20,000
3) ₹20,001-₹30,000

vi. **Type of family:** The family of the homemaker was categorized on the basis of following type:

1) Nuclear family

2) Joint family

vii. **Family monthly Income (in rupee):** It referred to the monthly income of members of family of homemakers acquired from various sources in duration of a month.

1) ₹18,000-₹34,000
2) ₹ 34,001-₹50,000
3) ₹ 50,001-₹66,000

viii. **Working Experience (in years):** It referred to the number of completed years working in the related field at the time of data collection.

Hotel managers:

1) 7-17 years
2) 18-28 years
3) 29-39 years

Event managers:

1) 5-13 years
2) 14-21 years
3) 22-30 years

ix. **Years of establishment of the hotel:** It referred to the number of years since the organization began or established at the time of data collection.

Hotels:

1) 67-97 Years
2) 37-66 Years
3) 6-36 Years

Event management Companies:

1) 38-26 Years
2) 25-14 Years
3) 13-1 Years

x. **Size of the hotel:** It referred to the size of hotel categorized on the basis of number of rooms.

1) Small (25 rooms or less)
2) Medium (26 - 100 rooms)

xi. **Star rating of the hotel:** It referred to the star rating of the hotel based on number of facilities provided by the hotel

1) 3 Star
2) 4 Star

xii. **In-house waste disposal facility:** It referred to any waste disposal facility which was available at the hotel. It was categorized as below:

1) Waste bins
2) Composting unit
3) Biogas plant
4) Organic waste container
5) Incineration
6) Sanitary Landfill

xiii. **Types of events organized by event organizers:** It referred to different events organized by the event organizers. it was categorized as below:

Homemakers:

1) Kitty party
2) Musical event – Sangeet
3) Religious events
4) Birthday party
5) Surprise party
6) Engagement party
7) Get together
8) Children get together
9) Anniversary party
10) Baby shower party
11) New year party

Hotel managers and event managers:

1) Meetings
2) Conferences
3) Exhibitions
4) Seminars
5) Product launching

6) Annual celebration
7) Promotional events
8) New year party
9) Weddings
10) Anniversary party
11) Engagement party
12) Baby shower party
13) Farewell party
14) Surprise party
15) Birthday party
16) Welcome party
17) Get together
18) Religious event

xiv. **Types of waste generated after events:** It referred to the type waste which was generated after the event. It is categorized as below:

1) Paper waste
2) Plastic waste
3) Food waste
4) Flower waste
5) Water waste
6) Wood waste
7) Metal waste
8) Cloth waste
9) Decorative waste
10) Thermocol waste
11) Glass waste

xv. **Extent of awareness of event organizers regarding waste management:** It referred to extent of awareness of event organizers regarding waste management. It comprises of a summated rating scale of likert type having statements related to waste management. The scale consisted of 22 statements where 11 statements were positive and 11 were negative. The respondents were asked to state whether they “Agree”,

"Undecided" and "Disagree" which was scored 3 through 1 respectively to the positive statements. The scores were reversed in case of negative statements. Higher scores reflected high extent of awareness of event organizer regarding waste management. The minimum and maximum possible scores were divided into 3 categories on the basis of equal intervals as shown here. High scores revealed high extent of awareness regarding waste management.

Table 1: Categorization and range of scores for extent of awareness regarding waste management

Sr. No.	Extent of awareness of event organizers regarding waste management	Range of scores
1.	High Extent of Awareness	57-72
2.	Moderate Extent of Awareness	40-56
3.	Low Extent of Awareness	24-39

xvi. Waste management practices adopted by event organizers: It referred to the waste management practices adopted by event organizers. It comprises of a summated rating scale of likert type having 21 statements related to waste management. It had 3 point continuum for the responses "Always", "Sometimes" and "Never" which were scored 3 through 1 respectively. The scores were summated and the possible ranges of scores were divided into 3 categories having equal interval as shown here. Higher scores reflected good practices adopted by event organizer for waste management.

Table 2: Categorization and range of score for waste management practices adopted by event organizers

Sr. No.	Waste management practices adopted by event organizers	Range of scores
1.	Good	50-63
2.	Moderate	35-49
3.	Poor	21-34

xvii. **Extent of barriers faced in Waste management:** It referred to barriers faced in adopting waste management practices. It comprises of a summated rating scale of likert type having 8 statements related to waste management. The responses were “Major Barrier”, “Minor Barrier” and “Not a Barrier” where the score ascribed were 3 through 1. Higher scores reflected high barriers faced in waste management. The scores were summated and the possible ranges of scores were divided into 3 categories having equal interval as shown here.

Table 3: Categorization and range of scores for extent of barriers faced in waste management

Sr. No.	Extent of barriers faced in Waste management	Range of scores
1.	High extent of Barrier	19-24
2.	Moderate extent of Barrier	14-18
3.	Low extent of Barrier	8-13

3.9.2 Coding

Coding operation is usually done at this stage through which the categories of data are put in the form of tables.

3.9.3 Tabulation

Tabulation is part of the technical procedure wherein the classified data are put in the form of tables. The data were transferred from raw form into tabular form to give a clear picture of findings.

3.9.4 Statistical Analysis

Descriptive statistics: The data were presented in frequencies, percentage, mean, standard deviation and weighted mean.

Relational statistics: ANOVA(f-test), t-test and Co-efficient of Co-relation(r-test) were computed to test the hypotheses postulated for the study.

Table 4: Relational statistics applied to test the hypotheses

Test	Independent and Dependent Variables
ANOVA (f-test)	**Dependent variable:** Extent of awareness regarding waste management, Waste management practices adopted by event organizers and Extent of barriers faced in adopting waste management practices **with** **Independent Variable:** Personal Variable**:** Age, Educational Qualification, Marital Status and Personal monthly income (Homemakers) Personal Variable: Age, Educational Qualification, Working Experience (Hotel and Event managers) Family Variable: Family monthly income (Homemakers)
t-test	**Dependent Variable:** Extent of awareness regarding waste management, Waste management practices adopted by event organizers and extent of barriers faced in adopting waste management practices **with** **Independent Variable:** Personal Variable: Employment Status (Homemakers) Family Variable: Type of family (Homemaker)
Co-efficient of Co-relation (r-test)	**Dependent Variable:** Extent of awareness regarding waste management **with** **Dependent Variable:** Waste management practices adopted by event organizers
	Dependent Variable: Waste management practices adopted by event organizers **with** **Dependent Variable:** Extent of barriers faced in adopting waste management practices

3.10 Development of Audio visual aid

One of the objectives of the study was to develop an audio visual aid for creating awareness about waste management opportunities available in Vadodara city, Gujarat.

The content of the audio-visual aid was prepared. Opportunities of waste management in Vadodara were identified and contacted. The final dates of shooting were decided and the process began. The final editing and voice over was done by the experts.

CHAPTER IV

FINDINGS AND DISCUSSION

An attempt was made to ascertain the types of waste generated after events, extent of awareness regarding waste management, waste management practice adopted by event organizers and extent of barriers faced in adopting waste management. This chapter deals with presenting, interpreting and discussing the findings obtained through analysis of the data collected through interview schedule. The results are presented under following sub sections:

Section I: Background information of Respondents

Section II: Types of waste generated after the events

Section III: Awareness of the event organizers regarding waste management

Section IV: Waste management practices adopted by event organizers

Section V: Barriers faced in adopting waste management practices

Section VI: Testing of Hypotheses

Section VII: Audio-visual Aid

SECTION I

4.1 Background Information of the respondents

This section deals with background information of Homemakers, Hotel and Event Managers. The results regarding personal variable viz. Age (in years), Educational qualification, Marital status, Employment status, Personal monthly Income (in rupees), Working Experience (in years) and family variables such as, Type of Family and Family monthly Income (in rupees) are presented here. These information were gathered to find out their influence on dependent variables selected under study.

4.1.1 Background Information of the Homemakers: The data were collected from 40 homemakers. This section contained information regarding their Age (in years), Educational qualification, Marital status, Employment status, Personal monthly income (in rupees), Type of family and Family monthly Income (in rupees).

4.1.1.1 Personal Information of homemakers

Age (in years): The age of the respondents ranged between 25 to 78 years with the mean age of 42.35 years **(Table 5, Fig. 3)**. Little less than one-half (47.5%) of the respondents were in the age group of 25 to 42 years. Less than one-half (45%) of the respondents were in age group of 43 to 60 years and less than one-tenth (7.5%) of the respondents were in age group of 61 to 78 years.

Educational Qualification: The data in **table 5 and Fig. 3** revealed that equal percentage of respondents i.e. 27.5 per cent had education below SSC and were graduate (27.5%). More than one-tenth (15%) of the respondents had completed HSC. Little more than one-tenth (12.5%) of the respondents were post-graduate and one-tenth (10%) holds diploma degree. Less than one-tenth (7.5%) of the respondents had completed SSC.

Table 5: Distribution of the homemakers according to their personal Information

Sr. No.	Personal information of Homemakers	Respondents (n=40)	
		f	%
1.	**Age (in years)**		
	25-42 years	19	**47.5**
	43-60 years	18	45
	61-78 years	3	7.5
	Mean	**42.35**	
	S.D.	**13.49**	
2.	**Educational Qualification**		
	Below SSC (Below 10th pass)	11	**27.5**
	SSC (10th pass)	3	7.5
	HSC (12th pass)	6	15
	Diploma	4	10
	Graduate	11	**27.5**
	Post-Graduate	5	12.5
3.	**Marital Status**		
	Married	31	**77.5**
	Unmarried	3	7.5
	Divorced	1	2.5
	Widow	5	12.5
4.	**Employment Status**		
	Employed	15	37.5
	Not Employed	25	**62.5**
5.	**Personal Monthly Income (in rupees)**		
	No income	25	**62.5**
	₹10,000-₹20,000	8	20
	₹20,001-₹30,000	7	17.5
	Mean	**₹ 7750**	
	S.D.	**₹ 10450.74**	

Marital Status: The marital status of the respondents **(Table 5, Fig. 3)** revealed that little more than three-fourth (77.5%) of respondents were married, little more than one-tenth (12.5%) of respondents were widow, less than one-tenth (7.5%) of the respondents were unmarried and less than one-tenth (2.5%) of the respondents were divorced.

Employment Status: The data in **table 5 and Fig. 3** revealed that little less than two-third (62.5%) of the respondents were not employed anywhere whereas more than one-third (37.5%) of the respondents were employed.

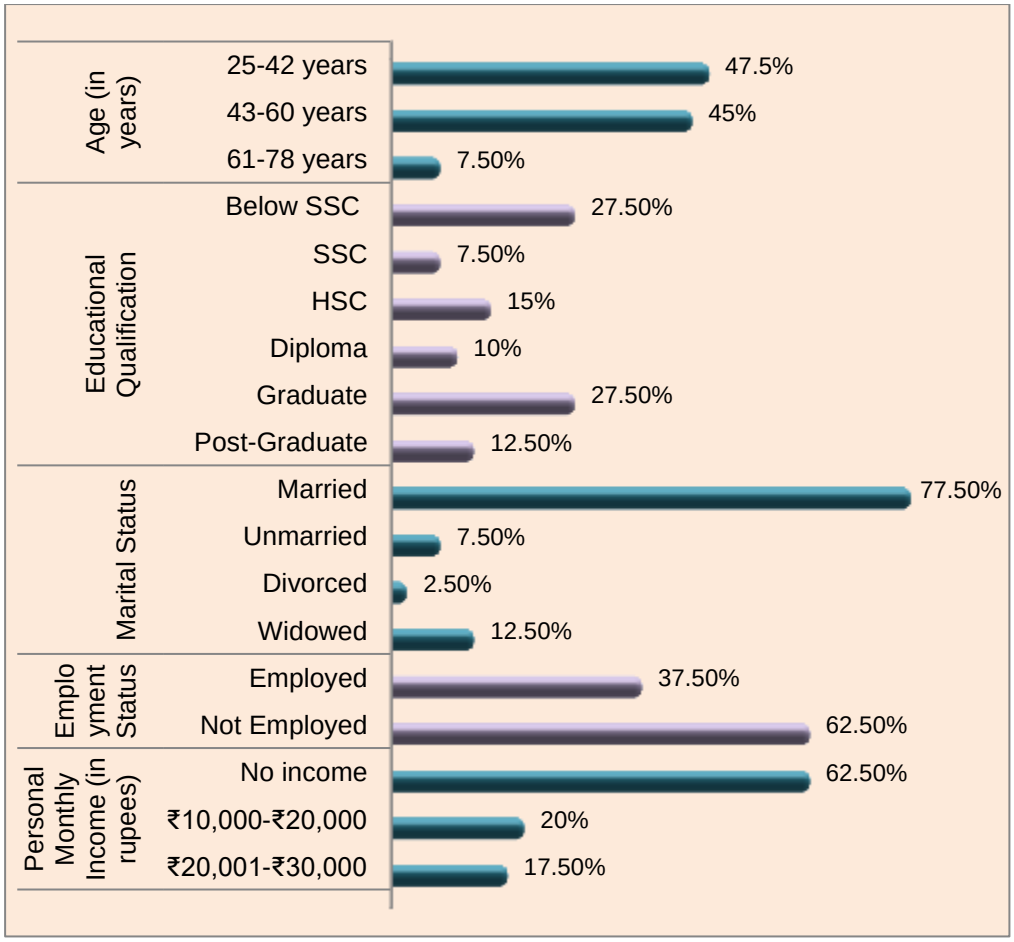


Figure 3: Percentage Distribution of Personal Information of Homemakers

Personal Monthly Income (in rupees): The total personal monthly income of the respondents ranged between ₹10,000 to ₹30,000 with the mean of ₹7,750 **(Table 5, Fig. 3).** It was found that less than two-third (62.5%) of the respondents did not had any personal income as they were not employed anywhere. Less than one-fourth of the respondents were earning between ₹10,000 to ₹20,000 (20%) and ₹20,001 to ₹30,000 (17.5%).

4.1.1.2 Family Information of homemakers

Type of Family: Three-fourth (75%) of the respondents belonged to nuclear family whereas one-fourth (25%) of the respondent belonged to joint family **(Table 6, Fig. 4).**

Family monthly income (in rupees): The total monthly income of the family ranged between ₹18,000 to ₹64,000 with the mean of ₹36,925

(Table 6, Fig. 4). Little less than one-half (47.5%) of the respondents had family monthly income between ₹18,000 to ₹34,000. More than one-third (37.5%) of the respondents had family monthly income between ₹34,001 to ₹50,000. More than one-tenth (15%) of the respondents had family monthly income between ₹50,001 to ₹66,000.

Table 6: Distribution of homemakers according to their family information

Sr. No.	Family information of Homemakers	Respondents (n=40)	
		f	%
1.	**Type of Family**		
	Joint Family	10	25
	Nuclear Family	30	**75**
2.	**Family Monthly Income (in rupees)**		
	₹18,000-₹33,000	19	**47.5**
	₹ 34,001-₹49,000	15	37.5
	₹ 49,001-₹64,000	6	15
	Mean	**₹36,925**	
	S.D.	**12726.6**	

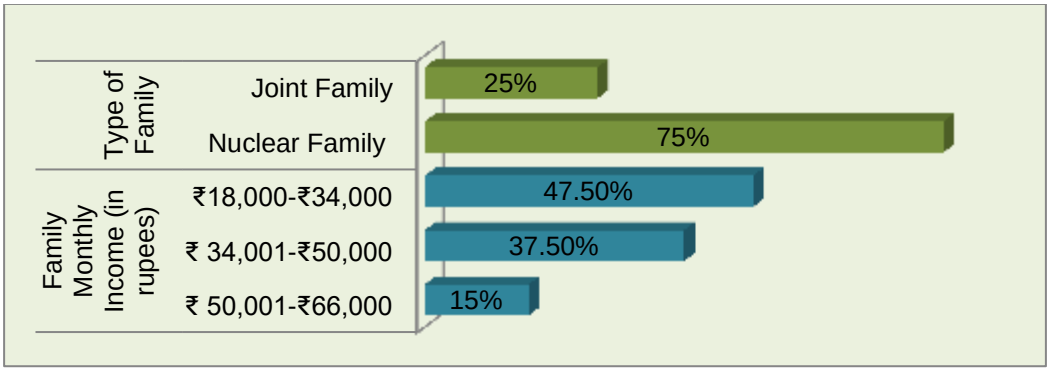


Figure 4: Percentage Distribution of Homemakers according to their Family Information

4.1.2 Background information of Hotel managers: The data were collected from 40 hotel managers of selected hotels of Vadodara city. This section contained information regarding their Age (in years), Educational qualification and Working experience (in years).

Age (in years): The age of the respondents ranged between 38-54 years with the mean age of 45.78 years **(Table 7, Fig. 5)**. Little more than one-third (37.5%) of the respondents were in the age group of 44 to 48 years. Little more than one-third (35%) of the respondents were

in age group of 38 to 43 years and little more than one-fourth (27.5%) of the respondents were in age group of 49 to 54 years.

Educational Qualification: The data in **table 7 and Fig. 5** revealed that more than one-half (55%) of the respondents holds graduation degree. More than one-third (37.5%) had done diploma in related field. Less than one-tenth (7.5%) of the respondents were post graduate.

Table 7: Distribution of hotel managers according to their personal information

Sr. No.	Personal information of Hotel managers	Respondents (n=40)	
		f	%
1.	**Age (in years)**		
	38-43 years	14	35
	44-48 years	15	**37.5**
	49-54 years	11	27.5
	Mean	**45.78**	
	S.D.	**4.65**	
2.	**Educational Qualification**		
	Diploma	15	37.5
	Graduate	22	**55**
	Post-graduate	3	7.5
3.	**Working experience (in years)**		
	7-17 years	11	27.5
	18-28 years	20	**50**
	29-39 years	9	22.5
	Mean	**21.5**	
	S.D.	**7.04**	

Working Experience (in years): The working experience of the respondents ranged between 7 to 39 years with the mean of 21.5 years. The data in **table 7 and Fig. 5** revealed that one half (50%) of the respondents had working experience of 18 to 28 years. Little more than one-fourth (27.5%) of the respondents had working experience of 7 to 17 years and less than one-fourth (22.5%) of the respondents had working experience of 29 to 39 years.

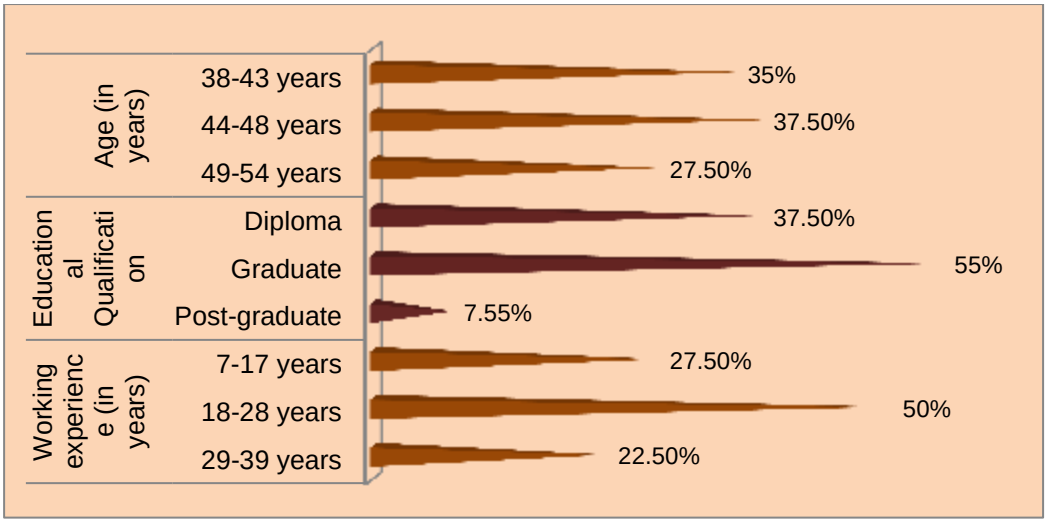


Figure 5: Percentage Distribution of Hotel managers according to their Personal information

4.1.3 Background information of Event managers: The data were collected from 40 Event managers. This section contained information regarding their Age (in years), Educational qualification and Working experience (in years).

Age (in years): The age of the respondents ranged between 26 to 50 years with the mean age of 38.88 years (**Table 8 and Fig. 6**). Two-fifth (40%) of the respondents were in the age group of 43 to 50 years. Almost one-third (32.5%) of the respondents were in age group of 34 to 42 years and little more than one-fourth (27.5%) of the respondents were in age group of 26 to 33 years.

Educational Qualification: The data in **table 8 and Fig. 6** revealed that little less than one-half (47.5%) of the respondents holds graduation degree. Almost one-third (32.5%) of the respondents had completed diploma in related field. Little more than one-tenth (12.5%) of the respondents were post-graduate.

Working Experience (in years): The working experience of the respondents ranged between 5 to 30 years with the mean of 14.65 years. The data in **table 8 and Fig. 6** and revealed that little more than one-half (52.5%) of the respondents had working experience of 5 to 13 years. More than one-third (37.5%) of the respondents had working

experience of 14 to 21 years and one-tenth (10%) of the respondents had working experience of 22 to 30 years.

Table 8: Distribution of event managers according to their personal information

Sr. No.	Personal information of Event managers	Respondents (n=40)	
		f	%
1.	**Age (in years)**		
	26-33 years	11	27.5
	34-42 years	13	32.5
	43-50 years	16	**40**
	Mean	**38.88**	
	S.D.	**7.11**	
2.	**Educational Qualification**		
	Diploma	13	32.5
	Graduate	19	**47.5**
	Post-graduate	8	12.5
3.	**Working experience (in years)**		
	5-13 years	21	**52.5**
	14-21 years	15	37.5
	22-30 years	4	10
	Mean	**14.65**	
	S.D	**6.85**	

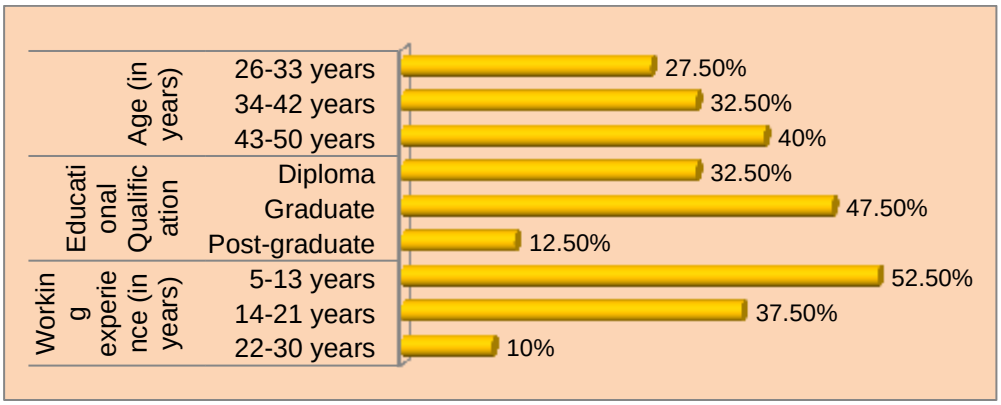


Figure 6: Percentage Distribution of Event Managers according to their Personal Information

4.1.4 Organizational Details of Hotel and Event managers

This section contained information about the hotel such as years of establishment of the hotel/event management company, size of hotel, star rating of hotel, in-house waste disposal facility available at hotel/ event management company. These information were collected just to

get the overview of the organizations from which the data were collected.

4.1.4.1 Organizational details of hotels: The data were collected from 40 hotel managers of selected hotels of Vadodara city. This section contained information regarding years of establishment of the hotel, size of hotel, star rating of hotel and in-house waste disposal facility.

Table 9: Distribution of hotels according to their organizational details

Sr. No.	Organizational Details of Hotels	Respondents (n=40)	
		f	%
1.	**Years of establishment of the hotel**		
	97-67 Years	2	5
	66-37 Years	8	20
	36-6 Years	30	**75**
	Mean	**24.8**	
	S.D.	**22.04**	
2.	**Size of hotel**		
	Small (25 rooms and less)	21	**52.5**
	Medium (26-100 rooms)	19	47.5
3.	**Star rating of hotel**		
	3 star	13	32.5
	4 star	27	**67.5**

Years of establishment of the hotel: The data from **table 9 and Fig. 7** revealed that the years of establishment of the hotels ranged between 6-97 years with the mean of 24.8 years. Three-fourth (75%) of the respondents were working in the hotels established between 6-36 years. Less than one-fourth (20%) of the respondents were working in the hotels established between 37-66 years. Less than one-tenth (5%) of the respondents were working in the hotels established between 67-97 years.

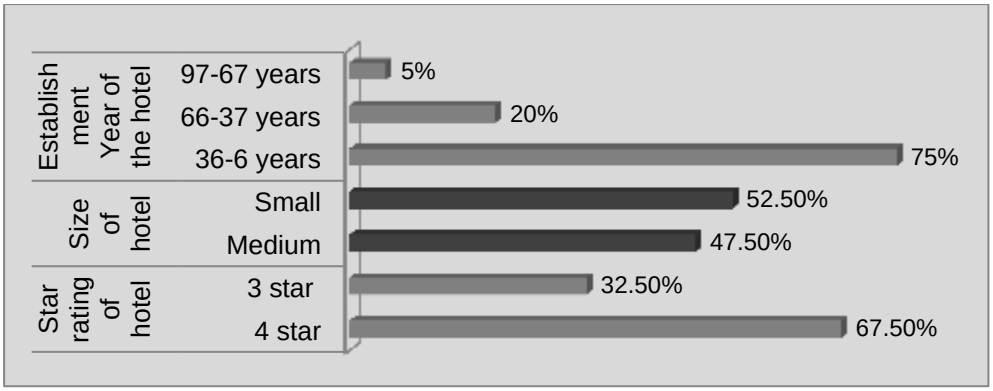


Figure 7: Percentage Distribution of Hotels according to their Organizational details

Size of Hotel: According to Andrews (2008), hotels having 25 rooms or less are categorized under small size of hotels, 26 to 100 rooms as medium size of hotels and 101 to 300 rooms are called as large sized hotels. The data in **table 9 and Fig. 7** revealed that little more than one-half (52.5%) of the respondents were working in the small size hotel. little less than one-half (47.5%) of the respondents were working in the medium size hotels.

Star rating of Hotel: The data in **table 9 and Fig. 7** revealed that little more than two-third (67.5%) of the respondents were working in 4 star hotel. Little less than one-third (32.5%) of the respondents were working in 3 star hotel.

Table 10: Distribution of the hotels according to availability in-house waste disposal facility

Sr. No.	In-house waste disposal facility	Respondents (n=40)	
		f	%
1.	Waste bins	37	**92.5**
2.	Composting Unit	3	7.5
3.	Separate Organic Waste Container	1	2.5

*Multiple responses

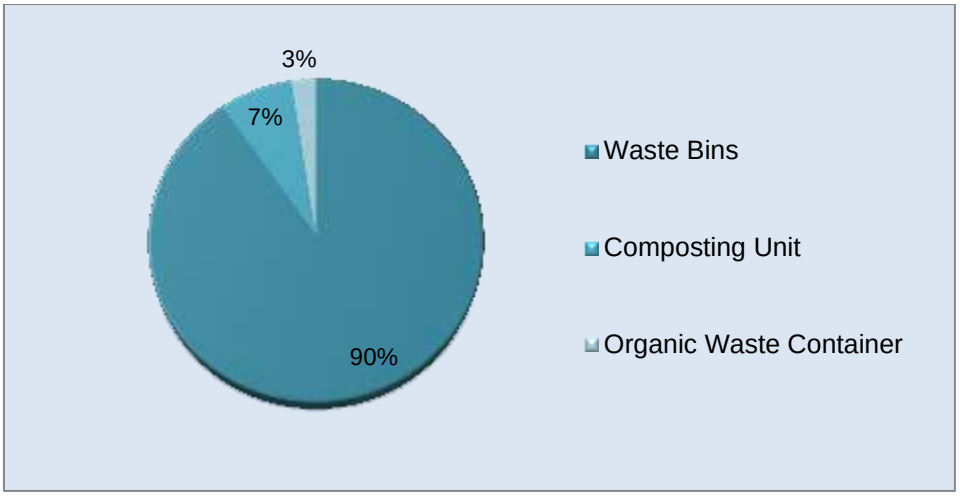


Figure 8: Percentage Distribution of Hotels according to availability of In-house waste disposal facilities

In-house waste disposal facilities: The data in **table 10 and Fig. 8** revealed that majority (92.5%) of the hotels were collecting the waste in the waste bins. Less than one-tenth of the hotels had composting unit (7.5%) and separate organic containers for organic waste disposal (2.5%).

4.1.4.2 Organizational details of event management companies: The data were collected from 40 event managers of event management companies of Vadodara city. This section contained information regarding years of establishment the event management company.

Table 11: Distribution of event management companies according to its establishment year

Years of establishment of the Event management company	Respondents (n=40)	
	f	%
38-26 Years	5	12.5
25-14 Years	9	22.5
13-1 Years	26	**65**
Mean	**13.65**	
S.D.	**9.27**	

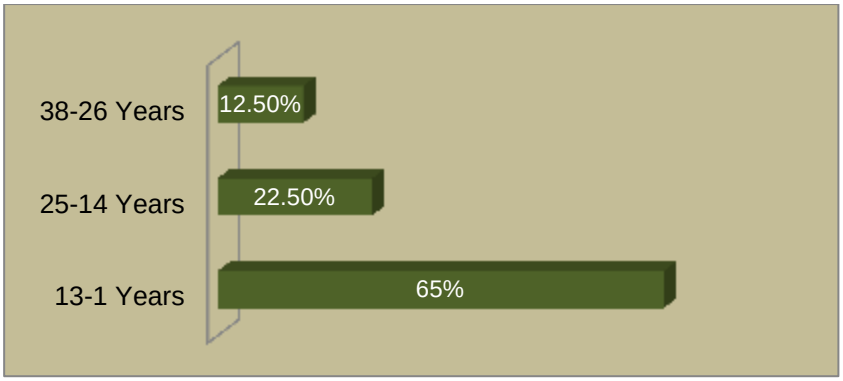


Figure 9: Percentage Distribution of Event management Companies according to their Years of establishment

Years of establishment of the event management companies: The data for **table 11 and Fig. 9** revealed that the companies were established between 1-38 years with the mean of 13.65 years. Little less than two-third (65%) of the respondents were working in the event management companies established between 1-13 years. Less than one-fourth (22.5%) of the respondents were working in the organization established between 14-25 years. Little less than one-tenth (12.5%) of the respondents were working in the organization established between 26-38 years.

4.1.5 Types of events organized by event organizers

This section deals with the information regarding types of events organized by the event organizers. Hotel managers and event managers organizes both formal events and informal events whereas homemakers are generally involved in organizing informal events. This information was gathered just to get an idea about types of events with which the event organizers are generally involved.

4.1.5.1 Types of events organized by Homemakers: The data in **table 12 and Fig. 10** revealed that majority of the respondents were involved in organizing religious events (80%). Little more than three-fourth (77.5%) of the respondents organized get togethers. Little less than two-third (65%) of the respondents organized birthday parties. Little more than one-third (35%) of the respondents organized engagement parties. Little more than one-fourth (27.5%) of the respondents

organized weddings. Less than one-fourth (22.5) of the respondents organized kitty parties, musical events and anniversary parties. More than one-tenth (17.5%) of respondents organized children get togethers. More than one-tenth (15%) of respondents organized baby shower parties. Little more than one-tenth (12.5%) of the respondents organized surprise parties. One-tenth (10%) of the respondents organized new year parties.

Table 12: Distribution of homemakers according to types of events organized by them

Types of event organized	Respondents (n=40)	
	f	%
Kitty party	9	22.5
Musical event (Sangeet e.t.c.)	9	22.5
Religious event	32	**80**
Birthday party	26	65
Surprise party	5	12.5
Engagement party	14	35
Get together	31	**77.5**
Children get together	7	17.5
Anniversary party	9	22.5
Baby shower party	6	15
New year party	4	10

*Multiple responses

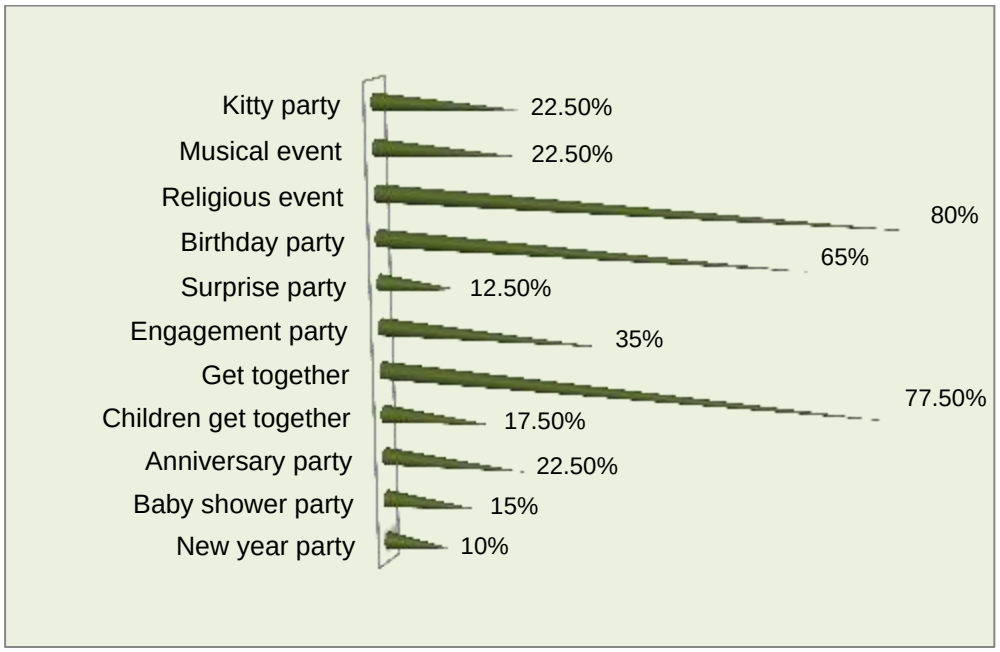


Figure 10: Percentage Distribution of Homemakers according to Types of events Organized by them

4.1.5.2 Types of events organized by Hotels: The data in **table 13 and Fig. 11, 12** revealed that all the respondents had organized weddings, anniversary party, engagement parties, baby shower parties, farewell parties, surprise parties, birthday parties, welcome parties, get togethers and musical events. Majority of the respondents had also organized new year parties (97.5%), meetings and religious events (92.5%), seminars (85%) and product launching events (80%). Little more than three-fourth (77.5%) of the respondents were involved in organizing annual celebrations and conferences. Three-fourth (75%) of the respondents organized promotional events also. Less than one-half (45%) of the respondents had organized exhibitions. Less than one-third (30%) of the respondents had organized cocktail parties.

4.1.5.3 Types of events organized by Event management companies: The data in **table 13 and Fig. 11, 12** revealed that all the respondents had organized engagement parties, birthday parties, welcome parties, get togethers and religious events. Majority of the respondents were engaged in organizing farewells and surprise parties (97.5%), baby shower parties (95%), new year parties, musical events and anniversary parties (92.5%), weddings (87.5%). Little more than three-fourth (77.5%) of the respondents had organized meetings. Less than three-fourth (72.5%) of the respondents were involved in organizing seminars. Less than two-third (62.5%) of the respondents had organized annual celebrations. Less than two-third (60%) of the respondents organized promotional and product launching events. More than one-half (57.5%) of the respondents had organized exhibitions. Little more than one-half (52.5%) of the respondents had also organized conferences. Little more than one-third (35%) of the respondents had organized cocktail parties.

Table 13: Distribution of hotels and event management companies according to types of events organized by them

Sr. No.	Types of events organized by hotel and event managers	Hotel managers (n=40)		Event managers (n=40)	
		f	%	f	%
1.	**Formal events**				
	Meetings	37	**92.5**	31	77.5
	Conferences	31	77.5	21	52.5
	Exhibition	18	45	23	57.5
	Seminar	34	85	29	72.5
	Product Launching	32	80	24	60
	Annual Celebration	31	77.5	25	62.5
	Promotional events	30	75	24	60
2.	**Informal events**				
	New year party	39	**97.5**	37	92.5
	Wedding	40	**100**	35	87.5
	Anniversary party	40	**100**	37	92.5
	Engagement party	40	**100**	40	**100**
	Baby shower party	40	**100**	38	95
	Farewell party	40	**100**	39	97.5
	Surprise party	40	**100**	39	97.5
	Birthday party	40	**100**	40	**100**
	Welcome party	40	**100**	40	**100**
	Get together	40	**100**	40	**100**
	Religious event	37	**92.5**	40	**100**
	Cocktail party	12	30	14	35
	Musical events	40	**100**	37	92.5

*Multiple responses

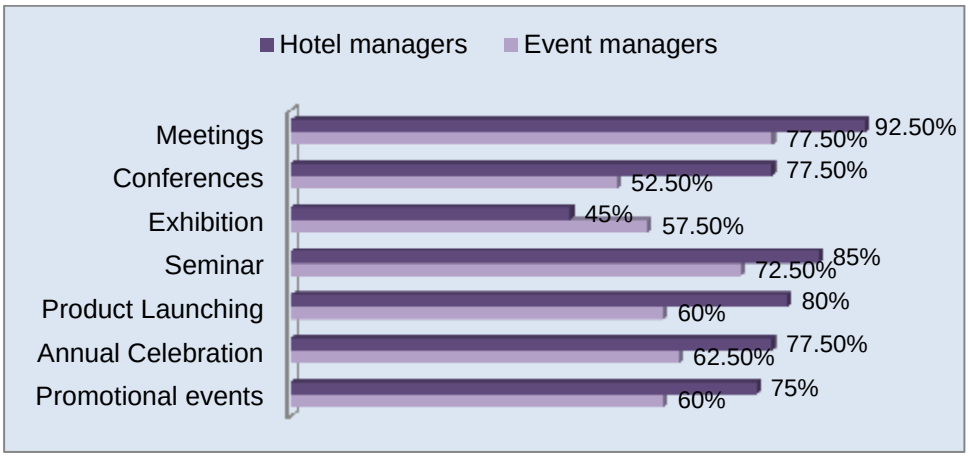


Figure 11: Percentage Distribution of Hotel and Event Managers according to Formal events organized by them

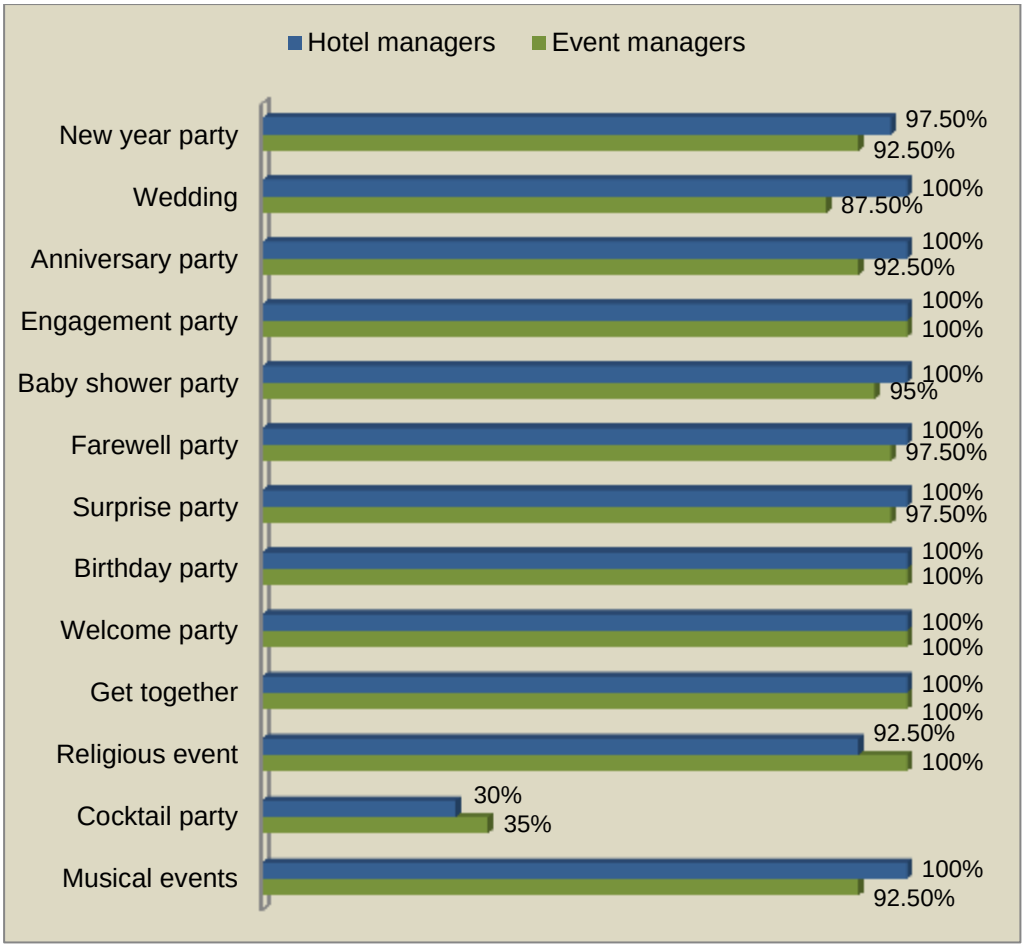


Figure 12: Percentage Distribution of Hotel and Event Managers according to Informal events organized by them

SECTION II

4.2 Types of waste generated after the event

This section contained information regarding types of waste generated after events. The waste were categorized as paper waste, plastic waste, food waste, flower waste, water waste, wood waste, metal waste, cloth waste, thermocol waste, glass waste and solid waste. These details were collected to get an outline of waste normally produced after events.

Table 14: Distribution of respondents according to types of waste generated after events

Sr. no.	Types of waste	Event organizers (n=120)					
		Homemakers		Hotel manager		Event manager	
		f	%	f	%	f	%
1.	Paper waste	28	70	40	**100**	40	**100**
2.	Plastic waste	40	**100**	40	**100**	40	**100**
3.	Food waste	40	**100**	40	**100**	40	**100**
4.	Flower waste	34	85	40	**100**	39	97.5
5.	Water waste	32	80	29	72.5	38	95
6.	Wood waste	11	27.5	34	85	24	60
7.	Metal waste	1	2.5	13	32.5	17	42.5
8.	Cloth waste	15	37.5	37	92.5	31	77.5
9.	Decorative waste	0	0	4	10	0	0
10.	Thermocol waste	0	0	3	7.5	0	0
11.	Glass waste	0	0	0	0	3	7.5
12.	Solid waste	0	0	0	0	1	2.5

*Multiple responses

4.2.1 Type of waste generated after events organized by Homemakers:

The data in **table 14 and Fig. 13** revealed that all the respondents stated that the wastes generated after the event were plastic waste and food waste. Majority of the respondents said that the waste generated after the event were flower waste (85%) and water waste (80%). Less than three-fourth (70%) of the respondents reported that paper waste was also generated after the event. More than one-third (37.5%) of the respondents stated that cloth waste was observed after the event. Little more than one-fourth (27.5%) of the respondents revealed that wood waste in the form of photo booths logs were observed and remains of logs from the hawan fire e.t.c. was generated after event.

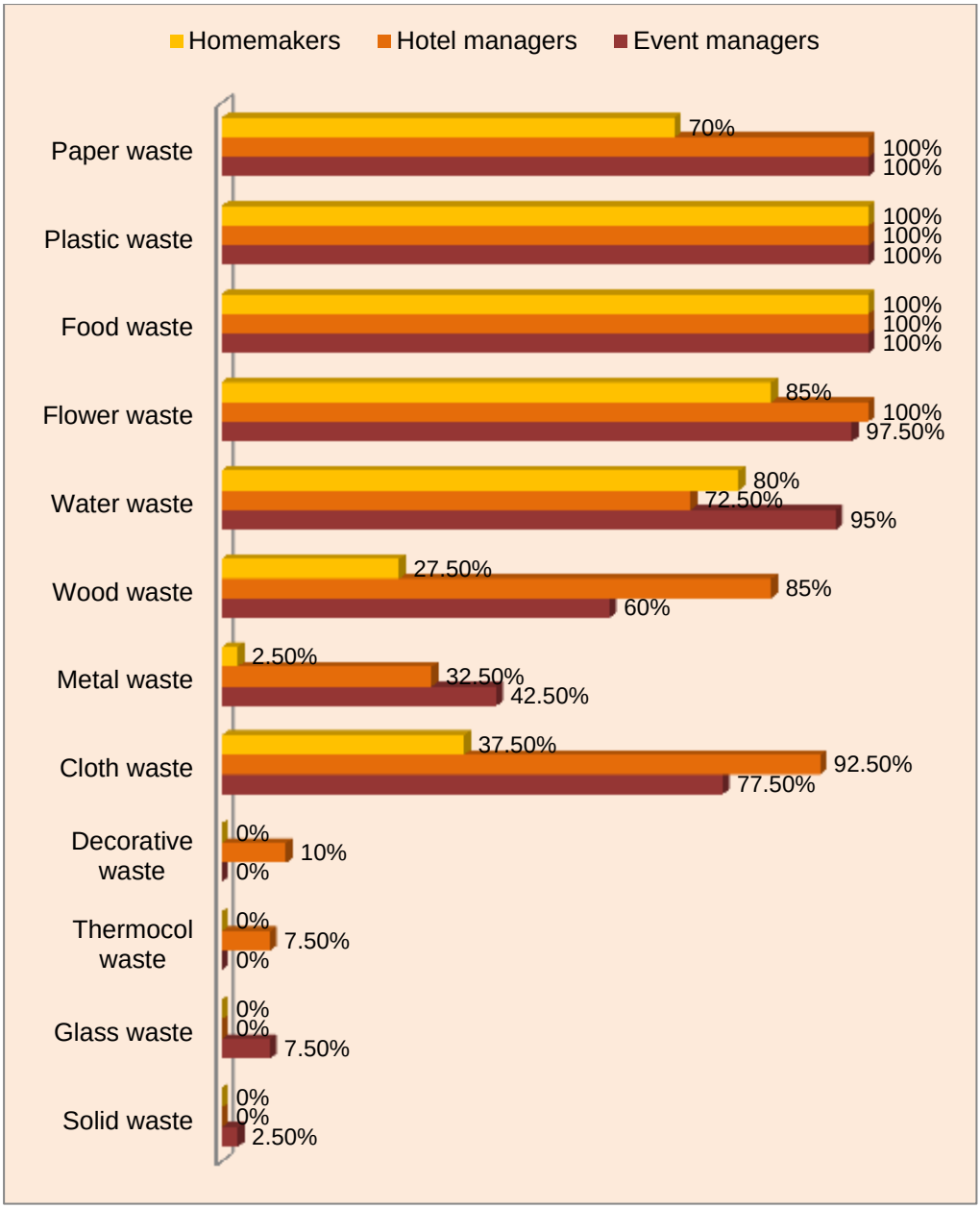


Figure 13: Percentage Distribution of respondents according to Types of Waste generated after the Events

4.2.2 Type of waste generated after events organized by Hotels: The data in **table 14 and Fig. 13** revealed that all the respondents said that the waste generated after the event were paper waste, plastic waste, food waste and flower waste. Majority of the respondents stated that the waste generated after the event were cloth waste (92.5%) and wood waste (85%). Less than three-fourth (72.5%) of the respondents reported that water waste was also generated after the event. Little less

than one-third (32.5%) of the respondents stated that metal waste was generated after the event.

4.2.3 Type of waste generated after events organized by Event management companies: The data in **table 14 and Fig. 13** revealed that all the respondents stated that the waste generated after the event were paper waste, plastic waste and food waste. Majority of the respondents said that the waste generated after the event was flower waste (97.5%) and water waste (95%). Little more than three-fourth (77.5%) of the respondents reported that cloth waste was generated after the event. Less than two-third (60%) of the respondents revealed that wood waste in the form of photo booths and hawan fire logs were generated after the event.

Plate 1: Waste littered on grounds after the events


Plate 2: Dry and wet waste disposed in one bin after events organized by hotels



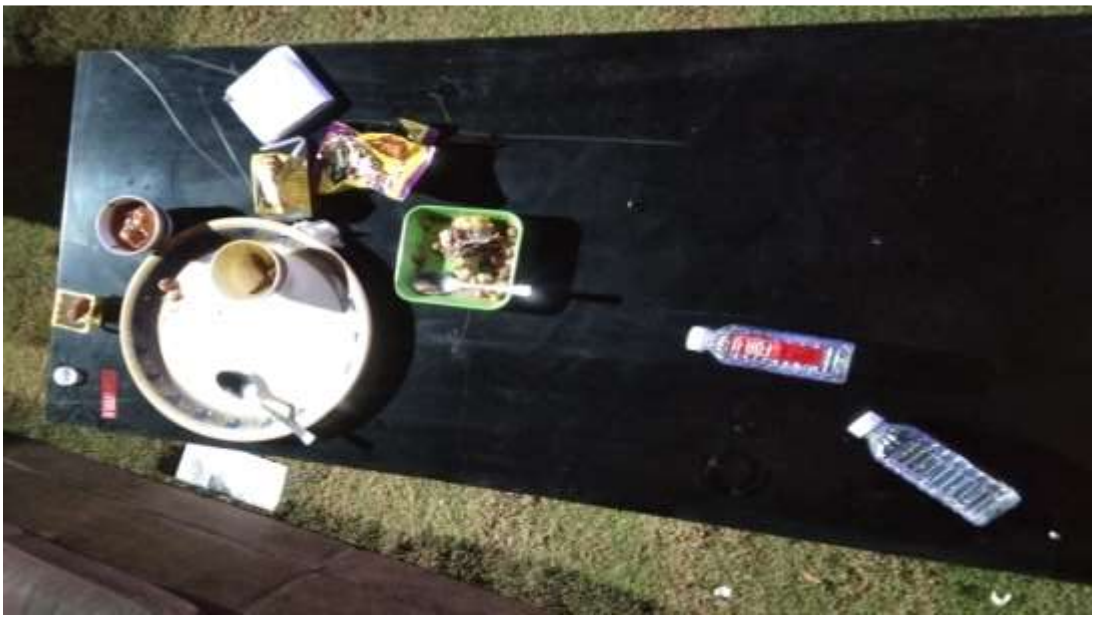


Plate 3: Paper, Plastic and Food waste generated after events

SECTION III

4.3 Awareness of Event Organizers Regarding Waste Management

The data in this section deals with the awareness of the respondents regarding waste management. Total 120 interviews of event organizers were scheduled, the respondents were homemakers, hotel managers and event managers. From each category of respondents 40 samples were collected. This scale consisted of statements related to waste management. According to Behera and Jatav (2022), the waste management can be categorized as prevention, reduction, reuse, recycling, recovery and disposal method. After reviewing the literature the researcher selected these dimensions as subsections of waste management. The respondents were asked to state whether they “Agree” or “Undecided” or “Disagree” with the statements. 22 statements were prepared, which consisted of 11 positive and 11 negative statements. For each positive statement the scores assigned were given 3 through 1 respectively and for negative statements the scores were reversed. Higher scores reflected high awareness of event organizer regarding waste management. This information was thought important to gather because the awareness regarding waste management may vary with their personal variable. Also, the awareness regarding waste management can influence their waste management practices.

4.3.1 Awareness of homemakers regarding waste management: The homemakers were interviewed to find out their awareness regarding waste management.

Preservation and Minimization: It was observed from the data in **table 15** that less than three-fourth (72.5%) of the respondents answered incorrectly as they agreed that “Single use plastic can reduce waste”. Less than two-third (60%) of the respondents answered incorrectly because they agreed that “Waste prevention is not useful in waste management”. More than one-half (55%) of the respondents were correct because they agreed that “Prevention is the elimination of waste before it is actually created”.

Reuse: The data in **table 15** revealed that majority of respondents answered correctly as they agreed that “Waste table cloths or napkins can be reused as wipes to clean surfaces” (95%), “Reusable resources such as furniture, Kitchenware, games, props, hangings e.t.c. can be donated as charity” (90%) on other hand 82.5 per cent of the respondents answered incorrectly as they agreed that “Paper waste cannot be reused”.

Recycle and Recovery: It can be stated from the data in **table 15** that little less than two-third (65%) of the respondents answered correctly because they agreed that “Recycling of waste can conserve natural resources and reduces pollution”. More than one-half (55%) of the respondents were Undecided about the statement “It is difficult to recycle decorative items made from wood”. One-half (50%) of the respondents were correct because they agreed that “Recovery is the retrieval of a part of the value of the materials through recycling”.

Disposal Methods: The data in **table 15** communicated that majority of the respondents anwered incorrectly as they agreed that “The waste can be thrown in drains” (95%), “Waste can be thrown anywhere in the open grounds” (92.5%), “Food waste cannot be sent for animal feed” (85%) and “Waste disposal in open places are not harmful to human health” (85%).

Table 15: Distribution of the homemakers according to their awareness regarding waste management

Sr. no.	Awareness regarding Waste management	Homemakers (n=40)						
		Agree		Undecided		Disagree		Weighted mean scores (1-3)
		f	%	f	%	f	%	
A.	**Prevention and Minimization**							
1.(+)	Prevention is the elimination of waste before it is actually created	22	55	18	45	0	0	2.55
2.(+)	Minimization is the reduction of waste during the life cycle of the product	21	52.5	19	47.5	0	0	2.53
3.(-)	Minimization means eliminating the use of product	17	42.5	18	45	5	12.5	2.3
4.(-)	Single use plastic can reduce waste	29	**72.5**	9	22.5	2	5	2.68
5.(-)	Waste prevention is not useful in waste management	24	**60**	16	40	0	0	2.6
							Average weighted mean	**2.53**
B.	**Reuse**							
1.(+)	Reuse is a process of putting waste materials back into use instead of discarding them	27	67.5	13	32.5	0	0	2.68
2.(-)	Paper waste cannot be reused	33	82.5	5	12.5	2	5	2.78
3.(+)	Flower waste can be used to make incense stick	25	62.5	15	37.5	0	0	2.63
4.(-)	Plastic bottles cannot be reused by refilling water	16	40	6	15	18	45	1.95
5.(+)	Reusable resources such as furniture, Kitchenware, games, props, hangings e.t.c. can be donated as charity	36	**90**	4	10	0	0	2.9
6.(+)	Waste table cloths or napkins can be reused as wipes to clean surfaces	38	**95**	2	5	0	0	2.95
							Average weighted mean	**2.64**

Table 15 contd.

Table 15 contd.

C.	**Recycle and Recovery**							
1.(+)	Recycling of waste is one of the disposal method	19	47.5	19	47.5	2	5	2.43
2.(+)	Recovery is the retrieval of a part of the value of the materials through recycling	20	50	19	47.5	1	2.5	2.48
3.(-)	It is difficult to recycle decorative items made from wood	12	30	22	**55**	6	15	2.15
4.(+)	Recycling of waste can conserve natural resources and reduces pollution	26	**65**	14	35	0	0	2.65
							Average weighted mean	**2.43**
D.	**Disposal Methods**							
1.(+)	Waste can be disposed by using Chemical and Biological treatment methods	16	40	24	60	0	0	2.4
2.(+)	Pyrolysis method is the heating of an organic material, such as biomass, in the absence of oxygen	6	15	34	85	0	0	2.15
3.(-)	Food waste cannot be sent for animal feed	34	85	3	7.5	3	7.5	2.78
4.(-)	Waste can be thrown in drains	38	**95**	2	5	0	0	2.95
5.(-)	Waste disposal in open places are not harmful to human health	34	85	5	12.5	1	2.5	2.83
6.(-)	Landfilling method of waste disposal is least used method	18	45	20	50	2	5	2.4
7.(-)	Waste can be thrown anywhere in the open grounds	37	**92.5**	2	5	1	2.5	2.9
							Average weighted mean	**2.56**
Total Weighted Mean								**2.54**

4.3.2 Awareness of hotel managers regarding waste management: The hotel managers were interviewed to find out their awareness regarding waste management.

Preservation and Minimization: It was found from the data in **table 16** that all the respondents answered correctly because they agreed that “Prevention is the elimination of waste before it is actually created” and majority (95%) of the respondents answered correct as they agreed that “Minimization is the reduction of waste during the life cycle of the product”. All the respondents answered incorrectly as they agreed that “Single use plastic can reduce waste”. Majority of the respondents agreed that “Waste prevention is not useful in waste management” (97.5%), hence their answer was incorrect.

Reuse: It was revealed from the data in **table 16** that all the respondents were correct because they agreed that “Reuse is a process of putting waste materials back into use instead of discarding them”, “Flower waste can be used to make incense stick”, “Reusable resources such as furniture, Kitchenware, games, props, hangings e.t.c. can be donated as charity” and “Waste table cloths or napkins can be reused as wipes to clean surfaces”. All the respondents were incorrectly as they agreed that “Paper waste cannot be reused”.

Recycle and Recovery: It was observed from the data that all the respondents answered correctly as they agreed that “Recycling of waste can conserve natural resources and reduces pollution” (**Table 16**). Majority of the respondents answered correct because they agreed that “Recovery is the retrieval of a part of the value of the materials through recycling” (97.5%) and “Recycling of waste is one of the disposal methods” (90%).

Disposal Methods: It was communicated from the **table 16** that all the respondents answered incorrectly as they agreed that “Food waste

cannot be sent for animal feed", "Waste can be thrown in drains", "Waste disposal on open places are not harmful on human health", "Landfilling method of waste disposal is least used method and waste can be thrown anywhere in the open grounds". Majority of respondents answered correct as they agreed that "Pyrolysis method is the heating of an organic material, such as biomass, in the absence of oxygen" (97.5%).

Table 16: Distribution of the hotel managers according to their awareness regarding waste management

Sr. no.	Awareness regarding Waste management	Hotel managers (n=40)						
		Agree		Undecided		Disagree		Weighted mean scores (1-3)
		f	%	f	%	f	%	
A.	**Prevention and Minimization**							
1.(+)	Prevention is the elimination of waste before it is actually created	40	**100**	0	0	0	0	3.0
2.(+)	Minimization is the reduction of waste during the life cycle of the product	39	97.5	1	2.5	0	0	2.98
3.(-)	Minimization means eliminating the use of product	38	95	1	2.5	1	2.5	2.93
4.(-)	Single use plastic can reduce waste	40	**100**	0	0	0	0	3.0
5.(-)	Waste prevention is not useful in waste management	39	97.5	0	0	1	2.5	2.95
							Average weighted mean	**2.97**
B.	**Reuse**							
1.(+)	Reuse is a process of putting waste materials back into use instead of discarding them	40	**100**	0	0	0	0	3.0
2.(-)	Paper waste cannot be reused	40	**100**	0	0	0	0	3.0
3.(+)	Flower waste can be used to make incense stick	40	**100**	0	0	0	0	3.0
4.(-)	Plastic bottles cannot be reused by refilling water	39	97.5	0	0	1	2.5	2.95
5.(+)	Reusable resources such as furniture, Kitchenware, games, props, hangings e.t.c. can be donated as charity	40	**100**	0	0	0	0	3.0
6.(+)	Waste table cloths or napkins can be reused as wipes to clean surfaces	40	**100**	0	0	0	0	3.0
							Average weighted mean	**2.99**

Table 16 contd.

Table 16 contd.

C.	**Recycle and Recovery**							
1.(+)	Recycling of waste is one of the disposal method	36	90	0	0	4	10	2.8
2.(+)	Recovery is the retrieval of a part of the value of the materials through recycling	39	**97.5**	0	0	1	2.5	2.95
3.(-)	It is difficult to recycle decorative items made from wood	35	87.5	2	5	3	7.5	2.8
4.(+)	Recycling of waste can conserve natural resources and reduces pollution	40	**100**	0	0	0	0	3.0
							Average weighted mean	**2.89**
D.	**Disposal Methods**							
1.(+)	Waste can be disposed by using Chemical and Biological treatment methods	33	82.5	6	15	1	2.5	2.8
2.(+)	Pyrolysis method is the heating of an organic material, such as biomass, in the absence of oxygen	39	**97.5**	1	2.5	0	0	2.98
3.(-)	Food waste cannot be sent for animal feed	40	**100**	0	0	0	0	3.0
4.(-)	Waste can be thrown in drains	40	**100**	0	0	0	0	3.0
5.(-)	Waste disposal in open places are not harmful on human health	40	**100**	0	0	0	0	3.0
6.(-)	Landfilling method of waste disposal is least used method	40	**100**	0	0	0	0	3.0
7.(-)	Waste can be thrown anywhere in the open grounds	40	**100**	0	0	0	0	3.0
							Average weighted mean	**2.90**
Total Weighted Mean								**2.94**

4.3.3 Awareness of event managers regarding waste management: The event managers were interviewed to find out their awareness regarding waste management.

Preservation and Minimization: On the basis of respondent's responses in **table 17** it was found that all the respondents were correct because they agreed that "Prevention is the elimination of waste before it is actually created". All the respondents answered incorrectly as they agreed that "Single use plastic can reduce waste". Majority (97.5%) of respondents answered incorrectly because they agreed that "Waste prevention is not useful in waste management".

Reuse: The data in **table 17** revealed that all the respondents were correct because they agreed that "Flower waste can be used to make incense stick" and "Waste table cloths or napkins can be reused as wipes to clean surfaces". Majority (97.5%) of respondents were correct as they agreed that "Reuse is a process of putting waste materials back into use instead of discarding them", "Reusable resources such as furniture, Kitchenware, games, props, hangings e.t.c. can be donated as charity". All the respondents answered incorrectly as they agreed that "Paper waste cannot be reused". Majority (97.5%) of the respondents were incorrect because they agreed "Plastic bottles cannot be reused by refilling water".

Recycle and Recovery: It was observed from **table 17** that that majority (97.5%) of the respondents agreed that "Recycling of waste can conserve natural resources and reduces pollution" hence, they were correct. Majority (90%) of the respondents were correct because they agreed that "Recovery is the retrieval of a part of the value of the materials through recycling". Majority (85%) of respondents answered incorrectly as they agreed that "It is difficult to recycle decorative items made from wood".

Disposal Methods: It was found from **table 17** that all the respondents answered incorrectly as they agreed that "Food waste cannot be sent for animal feed", "Waste can be thrown in drains", "Waste disposal on open

places are not harmful on human health" and "Waste can be thrown anywhere in the open grounds" Majority (97.5%) of respondents were incorrect as they agreed that "Landfilling method of waste disposal is least used method". More than two-third (77.5%) of the respondents were correct as they agreed that "Pyrolysis method is the heating of an organic material, such as biomass, in the absence of oxygen".

Table 17: Distribution of the event managers according to their awareness regarding waste management

Sr. no.	Awareness regarding Waste management	Event Managers (n=40)						
		Agree		Undecided		Disagree		Weighted mean scores (1-3)
		f	%	f	%	f	%	
A.	**Prevention and Minimization**							
1.(+)	Prevention is the elimination of waste before it is actually created	40	**100**	0	0	0	0	3.0
2.(+)	Minimization is the reduction of waste during the life cycle of the product	38	95	2	5	0	0	2.95
3.(-)	Minimization means eliminating the use of product	38	95	2	5	0	0	2.95
4.(-)	Single use plastic can reduce waste	40	**100**	0	0	0	0	3.0
5 (-)	Waste prevention is not useful in waste management	39	**97.5**	1	2.5	0	0	2.98
							Average weighted mean	**2.98**
B.	**Reuse**							
1.(+)	Reuse is a process of putting waste materials back into use instead of discarding them	39	97.5	0	0	1	2.5	2.95
2.(-)	Paper waste cannot be reused	39	97.5	0	0	1	2.5	2.95
3.(+)	Flower waste can be used to make incense stick	40	**100**	0	0	0	0	3.0
4.(-)	Plastic bottles cannot be reused by refilling water	39	97.5	0	0	1	2.5	2.95
5.(+)	Reusable resources such as furniture, Kitchenware, games, props, hangings e.t.c. can be donated as charity	39	97.5	0	0	1	2.5	2.95
6.(+)	Waste table cloths or napkins can be reused as wipes to clean surfaces	40	**100**	0	0	0	0	3.0

Table 17 contd.

Table 17 contd.

					Average weighted mean			**2.97**
C.	**Recycle and Recovery**							
1.(+)	Recycling of waste is one of the disposal method	28	70	7	67.5	5	12.5	2.58
2.(+)	Recovery is the retrieval of a part of the value of the materials through recycling	36	**90**	4	10	0	0	2.9
3.(-)	It is difficult to recycle decorative items made from wood	34	85	4	10	2	5	2.8
4.(+)	Recycling of waste can conserve natural resources and reduces pollution	39	**97.5**	1	2.5	0	0	2.98
					Average weighted mean			**2.82**
D.	**Disposal Methods**							
1.(+)	Waste can be disposed by using Chemical and Biological treatment methods	2	5	11	27.5	27	67.5	1.38
2.(+)	Pyrolysis method is the heating of an organic material, such as biomass, in the absence of oxygen	31	77.5	9	22.5	0	0	2.78
3.(-)	Food waste cannot be sent for animal feed	40	**100**	0	0	0	0	3.0
4.(-)	Waste can be thrown in drains	40	**100**	0	0	0	0	3.0
5.(-)	Waste disposal in open places are not harmful on human health	40	**100**	0	0	0	0	3.0
6.(-)	Landfilling method of waste disposal is least used method	39	**97.5**	0	0	1	2.5	2.95
7.(-)	Waste can be thrown anywhere in the open grounds	40	**100**	0	0	0	0	3.0
					Average weighted mean			**2.59**
Total Weighted Mean								**2.84**

4.3.4 Extent of Awareness of respondents regarding waste management:

The responses of the respondents on awareness regarding waste management "Agree", "undecided" and "Disagree" were given scores of 3 through 1 respectively. The possible maximum and minimum scores were divided in three categories having equal intervals. Higher scores indicated high extent of awareness of event organizers regarding waste management.

Table 18: Extent of awareness of event organizers regarding waste management

Extent of Awareness of event organizers regarding waste management (Range of scores)	Event Organizers (n=120)					
	Homemakers (n=40)		Hotel Managers (n=40)		Event Manager (n=40)	
	f	%	f	%	f	%
High Extent of Awareness (57-72)	30	**75**	0	0	40	**100**
Moderate Extent of Awareness (40-56)	10	25	40	**100**	0	0

It could be concluded from the **table 18** that homemakers and event managers had high extent of awareness regarding waste management. It was found that the hotel managers had moderate extent of awareness regarding waste management. Three- fourth (75%) of the homemakers had high extent of awareness regarding waste management.

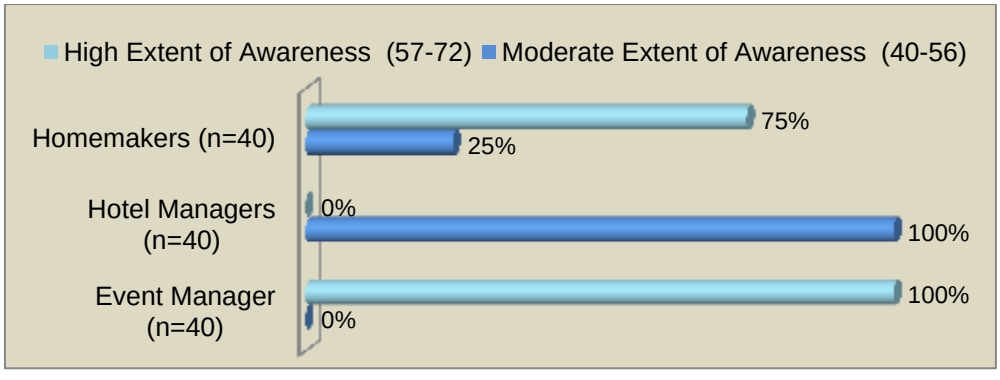


Figure 14: Percentage Distribution of Extent of Awareness of event organizers regarding waste management

SECTION IV

4.4 Waste Management Practices Adopted by Event Organizers

This section includes statements related to practices that can be adopted for waste management. The data were collected from 120 respondents which includes 40 homemakers, 40 hotel managers and 40 event managers. The respondents were asked to state how often they adopt practices for waste management. The responses were “Always” or “Sometimes” or “Never” which were scored 3 through 1 respectively. Higher scores revealed good practices for waste management. It was though necessary to find out waste management practices of event organizers as after every event, lot of waste is generated which if not managed can have harmful impacts on environment as well as human health. The practices can be influenced by barriers faced in waste management by event organizers.

4.4.1 Waste management practices adopted by Homemakers: The data in the **table 19** showed that majority of respondents always “Repair broken equipment instead of purchasing a new one” (90%), “Donate leftover food to charity to reduce waste” (90%), “Use reusable tableware” (82.5%), “Send waste to landfills” (82.5%) and “Collect the waste in separate containers” (80%). Majority of the respondents never “Throw waste in drain” (90%) and “Send waste for thermal treatment” (80%).

4.4.2 Waste management practices adopted by Hotel manager: It was found from **table 20** that all the respondents always “Use reusable tableware, “Purchase products in bulk to reduce the need for packaging” and “Repairs broken equipment instead of purchasing a new one”. All the respondents never “Burn the waste which is not segregated” and “Throw the waste in drain”. Majority (97.5%) of respondents always “Empties the containers regularly”, “Sent the food waste for animal feed”, “Purchase supplies in reusable containers (Flowers, Food e.t.c.)” and “Donate leftover food to charity to reduce waste”.

4.4.3 Waste management practices adopted by Event Management companies: The data in the **table 21** showed that all the respondents always “Use reusable tableware”. All the respondents never “Burn the waste which is not segregated” and “Throw the waste in drain”. Majority of the respondents always “Empties the containers regularly”, “Print on both sides of paper to reduce paper waste (Broachers for advertisement or cards)” and “Repair broken equipment instead of purchasing a new one” (97.5%) and “Purchase recyclable materials” and “Donate leftover food to charity to reduce waste” (95%).

Table 19: Distribution of homemakers according to waste management practices adopted by them

Sr. no.	Waste management practices	Homemakers (n=40)						
		Always		Sometimes		Never		Weighted mean scores (1-3)
		f	%	f	%	f	%	
1.	Segregate wet and dry waste	10	25	20	50	10	25	2.0
2.	Segregate bio-degradable and non-biodegradable wastes	10	25	16	40	14	35	1.9
3.	Collect the waste in separate containers	10	25	20	50	10	25	2.0
4.	Containers are emptied regularly	32	**80**	8	20	0	0	2.8
5.	Waste is sent to landfills	33	**82.5**	7	17.5	0	0	2.86
6.	Organic waste is used for making compost	7	17.5	19	47.5	14	35	1.83
7.	Plastic waste is sent for recycling	3	7.5	17	42.5	20	50	1.58
8.	Metal waste is sent for recycling	1	2.5	9	22.5	30	75	1.28
9.	Waste is sent for thermal treatment	0	0	8	20	32	**80**	1.2
10.	Food waste is sent for animal feed	25	62.5	13	32.5	2	5	2.58
11.	Purchase recyclable materials	14	35	20	50	6	15	2.2
12.	Using reusable tableware	33	**82.5**	6	15	1	2.5	2.8
13.	Purchase products in bulk to reduce the need for packaging	30	75	9	22.5	1	2.5	2.73
14.	Purchase supplies in reusable containers (Flowers, Food e.t.c.)	27	67.5	12	30	1	2.5	2.65
15.	Printing on both sides of paper to reduce paper waste(Broachers for advertisement or cards)	20	50	17	42.5	3	7.5	2.43
16.	Repairing broken equipment instead of purchasing a new one	36	**90**	4	10	0	0	2.9
17.	Donating leftover food to charity to reduce waste	36	**90**	4	10	0	0	2.9
18.	Waste which is not segregated is burned	0	0	13	32.5	27	67.5	1.33
19.	Throw waste to drain	1	2.5	3	7.5	36	**90**	1.13
20.	Keep all the garbage in one garbage container.	14	35	17	42.5	9	22.5	2.13
21.	Use wastewater for watering plants	5	12.5	22	**55**	13	32.5	1.8
Total Weighted Mean								**2.01**

Table 20: Distribution of the hotel managers according to waste management practices adopted by them

Sr. no.	Waste management practices	Hotel Managers (n=40)						
		Always		Sometimes		Never		Weighted mean scores (1-3)
		f	%	f	%	f	%	
1.	Segregate wet and dry waste	32	80	5	12.5	3	7.5	2.73
2.	Segregate bio-degradable and non-biodegradable wastes	26	65	10	25	4	10	2.55
3.	Collect the waste in separate containers	28	70	8	20	4	10	2.6
4.	Containers are emptied regularly	39	**97.5**	1	2.5	0	0	2.98
5.	Waste is sent to landfills	34	85	6	15	0	0	2.85
6.	Organic waste is used for making compost	15	37.5	19	**47.5**	6	15	2.23
7.	Plastic waste is sent for recycling	10	25	16	40	14	35	1.9
8.	Metal waste is sent for recycling	0	0	16	40	24	60	1.4
9.	Waste is sent for thermal treatment	0	0	12	30	28	70	1.3
10.	Food waste is sent for animal feed	39	**97.5**	1	2.5	0	0	2.98
11.	Purchase recyclable materials	30	75	9	22.5	1	2.5	2.73
12.	Using reusable tableware	40	**100**	0	0	0	0	3.0
13.	Purchase products in bulk to reduce the need for packaging	40	**100**	0	0	0	0	3.0
14.	Purchase supplies in reusable containers (Flowers, Food e.t.c.)	39	**97.5**	1	2.5	0	0	2.98
15.	Printing on both sides of paper to reduce paper waste(Broachers for advertisement or cards)	38	95	2	5	0	0	2.95
16.	Repairing broken equipment instead of purchasing a new one	40	**100**	0	0	0	0	3.0
17.	Donating leftover food to charity to reduce waste	39	**97.5**	1	2.5	0	0	2.98
18.	Waste which is not segregated is burned	0	0	0	0	40	**100**	1.0
19.	Throw waste to drain	0	0	0	0	40	**100**	1.0
20.	Keep all the garbage in one garbage container.	5	12.5	8	20	27	67.5	1.45
21.	Use wastewater for watering plants	0	0	8	20	32	80	1.2
Total Weighted Mean								**2.32**

Table 21: Distribution of the event managers according to waste management practices adopted by them

Sr. no.	Waste management practices	Event Managers (n=40)						
		Always		Sometimes		Never		Weighted mean scores (1-3)
		f	%	f	%	f	%	
1.	Segregate wet and dry waste	25	62.5	12	30	3	7.5	2.55
2.	Segregate bio-degradable and non-biodegradable wastes	15	37.5	22	**55**	3	7.5	2.3
3.	Collect the waste in separate containers	19	47.5	19	47.5	2	5	2.43
4.	Containers are emptied regularly	39	**97.5**	1	2.5	0	0	2.98
5.	Waste is sent to landfills	37	92.5	2	5	1	2.5	2.9
6.	Organic waste is used for making compost	12	30	24	**60**	4	10	2.2
7.	Plastic waste is sent for recycling	9	22.5	16	40	15	37.5	1.85
8.	Metal waste is sent for recycling	4	10	10	25	26	65	1.45
9.	Waste is sent for thermal treatment	2	5	7	17.5	31	77.5	1.28
10.	Food waste is sent for animal feed	32	80	5	12.5	3	7.5	2.73
11.	Purchase recyclable materials	33	82.5	6	15	1	2.5	2.8
12.	Using reusable tableware	40	**100**	0	0	0	0	3.0
13.	Purchase products in bulk to reduce the need for packaging	38	95	2	5	0	0	2.95
14.	Purchase supplies in reusable containers (Flowers, Food e.t.c.)	37	92.5	2	5	1	2.5	2.9
15.	Printing on both sides of paper to reduce paper waste (Broachers for advertisement or cards)	39	**97.5**	1	2.5	0	0	2.98
16.	Repairing broken equipment instead of purchasing a new one	39	**97.5**	1	2.5	0	0	2.98
17.	Donating leftover food to charity to reduce waste	38	95	1	2.5	1	2.5	2.93
18.	Waste which is not segregated is burned	0	0	0	0	40	**100**	1.0
19.	Throw waste to drain	0	0	0	0	40	**100**	1.0
20.	Keep all the garbage in one garbage container.	1	2.5	4	10	35	**87.5**	1.15
21.	Use wastewater for watering plants	4	10	17	42.5	19	47.5	1.63
Total Weighted Mean								**2.76**

Table 22: Weighted mean scores according to the waste management practices adopted by event organizers

Weighted mean Score (n=120)		
Homemakers	**Hotel managers**	**Event managers**
2.01	2.32	**2.76**

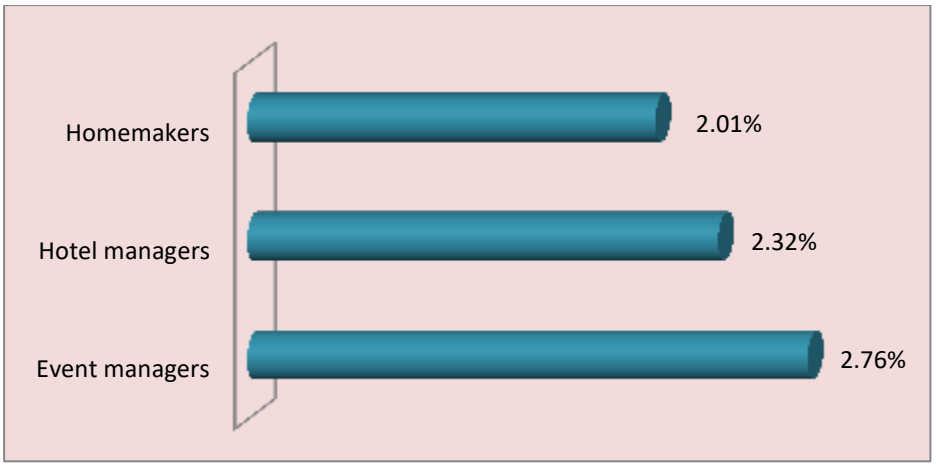


Figure 15: Percentage Distribution of Event organizers according to Waste Management Practices adopted by them

The weighted mean scores were found high for event managers. This shows that the practices of event managers were good as compared to hotel managers and homemakers **(Table 22, Fig. 15).**

4.4.5 Waste management practices of event organizers: It referred to the waste management practices adopted by event organizers. It comprised of 21 statements related to waste management. This reflected through summated rating scale where respondents were asked about the waste management practices adopted by them. It had 3 point continuum for the responses “Always”, “Sometimes” and “Never” which were scored 3 through 1 respectively. Higher scores reflected good practices adopted by event organizer for waste management.

Table 23: Distribution of Event organizers according to Waste management practices

Waste management practices of event organizers	Event Organizers (n=120)					
	Homemakers (n=40)		Hotel Managers (n=40)		Event Managers (n=40)	
	f	%	f	%	f	%
Good (50-63)	9	18.5	16	40	16	40
Moderate (35-49)	30	**80**	24	**60**	23	**57.5**
Poor (21-34)	1	2.5	0	0	1	2.5

It could be concluded from the **table 23** that majority (80%) of homemakers waste management practices were moderate. Less than two-third (60%) of the hotel managers adopted moderate waste management practices. More than one-half (57.5%) of the event managers adopted moderate waste management practices. Therefore, it can be concluded that the waste management practices of event organizers were moderate.

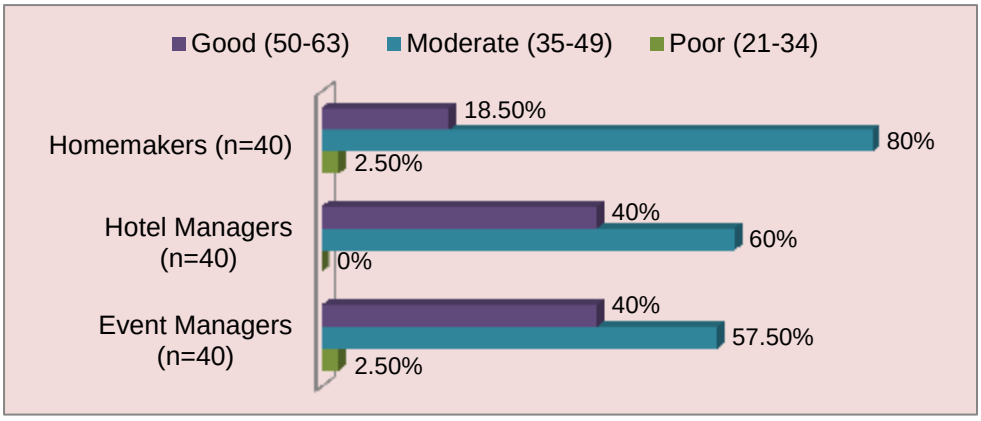


Figure 16: Percentage Distribution of Event organizers according to Waste management practices adopted by them

SECTION V

4.5 Barriers faced in Adopting Waste Management Practices

This section includes list of barriers that can be faced by event organizers in adopting waste management practices. The respondents were asked to state whether the listed barriers were “Major Barrier” or “Minor Barrier” or “Not a Barrier” in adopting waste management practices. The responses were scored 3 through 1 respectively. Higher scores revealed high barriers faced in adopting waste management practices.

4.5.1 Barriers faced by Homemakers in adopting waste management practices: The data in **table 24** revealed that the homemakers responded that “lack of equipment” for waste management (77.5%), “lack of space” (75%), “Lack of funds” (55%) and “Lack of Interest” (55%) were the major barriers faced by them in waste management. Little more than three-fourth (77.5%) of the respondents faced “lack of time” as minor barrier for managing waste.

Table 24: Distribution of the homemakers according to barriers faced by them in adopting waste management practices

Sr. no.	Barriers faced in adopting waste management practices	Homemakers (n=40)						
		Major Barrier		Minor Barrier		Not a Barrier		Weighted Mean Scores (1-3)
		f	%	f	%	f	%	
1.	Lack of knowledge	19	47.5	20	50	1	2.5	2.45
2.	Lack of funds	22	55	15	37.5	3	7.5	2.48
3.	Lack of interest	22	55	15	37.5	3	7.5	2.48
4.	Lack of manpower	11	27.5	28	70	1	2.5	2.25
5.	Lack of space	30	**75**	9	22.5	1	2.5	2.73
6.	Lack of time	6	15	31	**77.5**	3	7.5	2.08
7.	Lack of equipment	31	**77.5**	9	22.5	0	0	2.78
8.	Lack of government legislation and enforcement	13	32.5	25	**62.5**	2	5	2.28
Total weighted mean								**2.44**

4.5.2 Barriers faced by Hotel Managers in adopting waste management practices: It was found that the hotel managers responded that “lack of knowledge” (67.5%) and “lack of time” (65%) were the major barriers faced by them in waste management, “lack of funds” (65%) and “lack of manpower” (65%) were the minor barrier **(Table 25)** faced by them in managing waste.

Table 25: Distribution of the hotel managers according to barriers faced by them in adopting waste management practices

Sr. No.	Barriers faced in adopting waste management practices	Hotel Managers (n=40)						
		Major Barrier		Minor Barrier		Not a Barrier		Weighted Mean Scores (1-3)
		f	%	f	%	f	%	
1.	Lack of knowledge	27	**67.5**	13	32.5	0	0	2.68
2.	Lack of funds	14	35	26	**65**	0	0	2.35
3.	Lack of interest	24	60	16	40	0	0	2.6
4.	Lack of manpower	14	35	26	**65**	0	0	2.35
5.	Lack of space	23	57.5	17	42.5	0	0	2.58
6.	Lack of time	26	**65**	14	35	0	0	2.65
7.	Lack of equipment	25	62.5	14	35	1	2.5	2.6
8.	Lack of government legislation and enforcement	25	62.5	14	35	1	2.5	2.6
Total weighted mean								**2.55**

4.5.3 Barriers faced by Event Managers in adopting waste management practices: It was observed from **table 26** that the event managers responded that “lack of equipment” (67.5%), “Lack of time” (62.5%) and “lack of manpower” (60%) were the major barrier found by them in waste management. More than one-half (57.5%) of the respondents considered “Lack of interest” as minor barrier.

Table 26: Distribution of the event managers according to barriers faced by them in adopting waste management practices

Sr. no.	Barriers faced in adopting waste management practices	Event Managers (n=40)						
		Major Barrier		Minor Barrier		Not a Barrier		Weighted Mean Scores (1-3)
		f	%	f	%	f	%	
1.	Lack of knowledge	21	52.5	19	47.5	0	0	2.53
2.	Lack of funds	23	57.5	17	42.5	0	0	2.53
3.	Lack of interest	17	42.5	23	**57.5**	0	0	2.43
4.	Lack of manpower	24	60	16	40	0	0	2.6
5.	Lack of space	21	52.5	19	47.5	0	0	2.53
6.	Lack of time	25	**62.5**	15	37.5	0	0	2.63
7.	Lack of equipment	27	**67.5**	13	32.5	0	0	2.68
8.	Lack of government legislation and enforcement	21	52.5	19	47.5	0	0	2.53
Total weighted mean								**2.56**

Table 27: Weighted mean scores according to waste management practices adopted by the event organizers

Weighted mean Score (n=120)		
Homemakers	**Hotel managers**	**Event managers**
2.44	2.55	**2.56**

The weighted mean score was found high for event managers. This shows that the event managers faced more barriers in adopting waste management practices compared to hotel managers and homemakers **(Table 27 and Fig. 17)**.

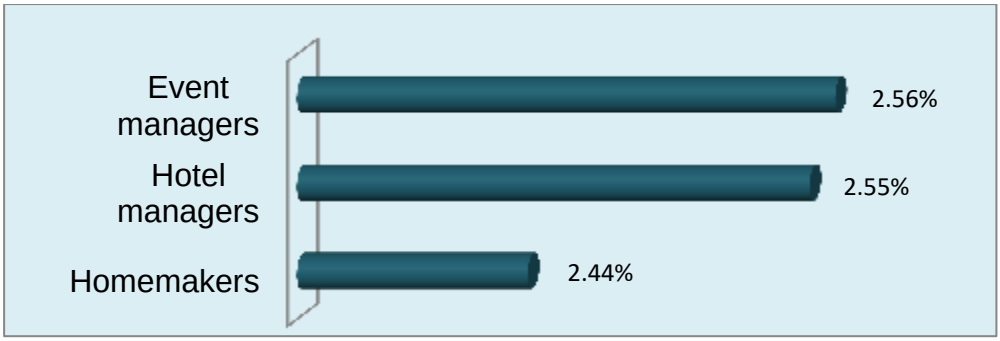


Figure 17: Percentage Distribution of Weighted mean scores of according to waste management practices adopted by the event organizers

4.5.4 Extent of barriers faced in adopting waste management practices:

The responses of the respondents on barriers faced in adopting waste management practices ("Major barrier", "Minor barrier" and "Not a barrier") were given scores of 3 through 1 respectively. The possible maximum and minimum scores were divided in three categories having equal intervals. They were 19-24 which indicated , 14-18 and 8-13. Higher scores indicated high extent of barrier of event organizers.

Table 28: Extent of barriers faced by event organizers in adopting waste management practices

Sr. No.	Extent of Barriers faced by event organizers in adopting waste management practices	Event Organizers (n=120)					
		Homemakers		Hotel Managers		Event Managers	
		f	%	f	%	f	%
1.	High extent of Barrier (19-24)	28	**70**	37	**92.5**	34	**85**
2.	Moderate extent of Barrier (14-18)	12	30	3	7.5	6	15

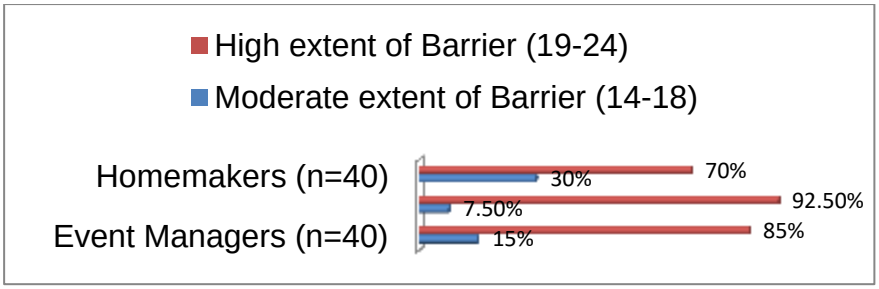


Figure 18: Percentage Distribution of Event Organizers according to Extent of Barriers faced by them in adopting waste management practices

It could be concluded from the **table 28** that majority (92.5%) of hotel managers and (85%) of event managers faced high extent of barriers Therefore, it can be concluded that the extent of barriers faced in adopting waste management practices were high.

Conclusion

The data were collected regarding personal, family information and organizational details of the respondents. The extent of awareness regarding waste management, waste management practices adopted by event organizers and extent of barriers faced in adopting waste management practices were analyzed. The age of the homemakers ranged between 25 to 78 years with the mean age of 42.35 years, in which the 47.50 per cent of the homemakers were in the age group of 25 to 42 years, 27.50 per cent of homemakers were educated below 10^{th} and were graduates and marital status of the homemakers were married (77.5%) and it was found that 62.50 per cent of the homemakers did not had any personal monthly income as they were not employed outside. It was found that 75 per cent of the homemakers belong to nuclear family and the total family monthly income ranged between ₹18000 to ₹ 64000 with the mean of ₹ 36,925, in which 47.5 per cent of the homemakers were having family monthly income between ₹18000 to ₹ 34000. The age of the hotel managers ranged between 38-54 years with the mean age of 45.78 years, in which the 37.50 per cent of the hotel managers were in the age group of 44 to 48

years, majority of hotel managers were graduates, working experience of the respondents ranged between 7 to 39 years with the mean of 21.5 years, in which the 50 per cent of them were working experience between 18 to 28 years. Years of establishment of the hotel ranged between 6-97 years with the mean of 24.8 years, in which 75 per cent of them were working in the hotel established between 6-36 years, 52.5% of the them were working in the small size hotel, 65 per cent of the them were working in 4 star hotel and majority (92.5%) of them were did not had any kind of in-house waste disposal facility. The age of the event managers ranged between 26 to 50 years with the mean age of 38.88 years, in which the 40 per cent of the event managers were in the age group of 43 to 50 years, majority of event managers were graduates, working experience of the event managers ranged between 5 to 30 years with the mean of 14.65 years, in which the 52.5 per cent of them had working experience between 5 to 13 years. Years of establishment of the event management companies ranged between 1-38 years with the mean of 13.65 years, in which 65 per cent of them were working in the event management company established between 1-13 years. Types of events organized by event organizers were categorized in two categories, formal events and informal events. The homemakers usually organizes informal events, hotel managers and event managers organizes both types of events in which the majority of them were involved in organizing informal events such as engagement party, birthday party, welcome party, get together and religious events. Types of waste generated after all the events organized by event organizers were plastic waste and food waste. It was also found that homemakers and event managers had high extent of awareness regarding waste management. The waste management practices of all the event organizers were moderate. High extent of barriers were faced by all the event organizers.

SECTION VI

4.6 Testing of Hypotheses

Several hypotheses were formulated to find out the relationship between selected variables for the present study. In the present investigation, as per the nature of variables f-test (ANOVA), t-test and coefficient of correlation were computed. For the purpose of statistical analysis, the hypotheses were formulated in null form. The results are presented in this section.

H_1: There exist a relationship between awareness of respondents regarding waste management and their selected personal and family variable

This broad hypothesis was made into several specific hypotheses.

$Ho_{1.1}$: There exist no relationship between awareness of respondents regarding waste management and their selected personal and family variable

To find out the relationship between awareness of respondents regarding waste management and their selected personal and family variable, ANOVA (f-test) was computed.

The results showed a significant variation in the awareness of the homemakers and event managers regarding waste management with their educational qualification (**Table 29**). The f value was not found significant between awareness of homemakers regarding waste management with their age, marital status and personal monthly income, awareness of hotel managers regarding waste management with their age, educational qualification and working experience and awareness of event managers regarding waste management with their age and working experience. Hence, the null hypothesis was partially accepted. It can be concluded that the awareness of homemakers and event managers regarding waste management was influenced by their educational level who were highly educated.

Table 29: Analysis of variance showing variation in the awareness of event organizers regarding waste management by their selected personal variable

Sr. no.	Awareness of event organizers regarding waste management	df	Sum of squares	Mean of squares	F-value	Level of significance
Homemakers						
1.	**Age**					
	Between groups	2	0.135	0.068	1.418	N.S.*
	Within groups	37	1.765	0.048		
2.	**Educational Qualification**					
	Between groups	4	0.567	0.142	3.719	0.05
	Within groups	35	1.333	0.038		
3.	**Marital Status**					
	Between groups	3	0.029	0.010	0.186	N.S.*
	Within groups	36	1.871	0.052		
4.	**Personal Monthly Income**					
	Between groups	2	0.186	0.093	2.004	N.S.*
	Within groups	37	1.714	0.046		
Hotel managers						
5.	**Age**					
	Between groups	2	12.096	6.048	1.109	N.S.*
	Within groups	37	201.804	5.454		
6.	**Educational Qualification**					
	Between groups	4	26.543	6.636	1.240	N.S.*
	Within groups	35	187.357	5.353		
7.	**Working Experience**					
	Between groups	2	17.413	8.707	1.640	N.S.*
	Within groups	37	196.487	5.310		
Event managers						
8.	**Age**					
	Between groups	2	7.161	3.580	1.604	N.S.*
	Within groups	37	82.614	2.233		
9.	**Educational qualification**					
	Between groups	4	0.567	0.142	3.719	0.05
	Within groups	35	1.333	0.038		
10.	**Working experience**					
	Between groups	2	4.187	2.093	0.905	N.S.*
	Within groups	37	85.588	2.313		

Note: *N.S. = Not Significant, df = Degree of Freedom

Table 30: Scheffe's test showing the mean significance in awareness of homemakers and event managers regarding waste management with educational qualification

Sr. No.	Awareness regarding waste management	Mean	df	Level of significance
Homemakers				
1.	**Educational qualification**			
	Below SSC (Belo 10th pass)	2.0	35	0.05
	SSC (10th pass)	2.0		
	HSC (12th pass)	2.67		
	Diploma	3.0		
	Graduate	3.0		
	Post graduate	3.0		
Significantly differed pairs: 1) Diploma, Graduate, Post graduate 2) HSC				
Event Managers				
2.	**Educational qualification**			
	Diploma	5.0	35	0.05
	Graduate	10.0		
	Post graduate	13.0		
Significantly differed pairs: 1) Post graduate 2) Graduate				

The statistical analysis in Scheffe's test on various categories of educational qualification of the homemakers revealed that those homemakers who were educated till Higher secondary significantly differed from those homemakers who were below 10th pass,10th pass, had Diploma, Graduation and Post graduation degree (**Table 30**). The educational qualification of the event managers revealed that those event managers who had diploma in related fields significantly differed from those event managers who had Graduation and Post graduation degree. Hence, it can be inferred that awareness regarding waste management was found higher among those homemakers and event managers who were highly educated.

$Ho_{1.2}$: There exist no relationship between awareness of respondents regarding waste management and their selected personal and family variable

To find out the relationship between awareness of respondents regarding waste management and their selected personal and family

variable, t-test was computed.

Table 31: t-test showing the difference in the awareness of event organizers regarding waste management by their personal and family variable

Sr. no.	Awareness of event organizers regarding waste management	Mean Scores	t-value	df	Level of Significance
Homemakers					
1.	**Employment status**				
	Employed	3.00	1.113	38	N.S.*
	Not Employed	2.92			
2.	**Type of family**				
	Joint family	2.80	-2.669	38	N.S.*
	Nuclear family	3.00			

Note: *N.S. = Not Significant, df = Degree of Freedom

The t values were not found significant for awareness regarding waste management of the homemakers with their employment status and type of family (**Table 31**). Hence, the null hypothesis was accepted. It was inferred that awareness of homemakers did not differ with their employment status and type of family.

H_2: There exist a relationship between waste management practices adopted by event organizers and their personal and family variables

This broad hypothesis was made into several specific hypotheses.

$Ho_{2.1}$: There exist no relationship between waste management practices adopted by event organizers and their personal and family variables

To find out a relationship between waste management practices adopted by event organizers and their personal and family variables, ANOVA (f-test) was computed.

Table 32: Analysis of variance showing variation in the waste management practices adopted by event organizers with their personal variable and family variable

Sr. no.	Waste management practices adopted by homemakers	df	Sum of squares	Mean of squares	F-value	Level of significance
Homemakers						
1.	**Marital Status**					
	Between groups	3	341.040	113.680	4.331	0.01
	Within groups	36	944.860	26.246		
2.	**Educational Qualification**					
	Between groups	4	491.411	122.853	5.412	0.01
	Within groups	35	794.48	22.700		
3.	**Age**					
	Between groups	2	258.148	129.074	4.647	0.05
	Within groups	37	1027.752	27.777		
4.	**Personal Monthly Income**					
	Between groups	2	12.446	6.223	0.181	N.S.*
	Within groups	37	1273.454	34.418		
5.	**Family Monthly Income**					
	Between groups	2	0.186	0.093	0.003	N.S.*
	Within groups	37	1285.714	34.749		
Hotel manager						
6.	**Age**					
	Between groups	2	36.894	18.447	2.437	N.S.*
	Within groups	37	280.081	7.570		
7.	**Educational Qualification**					
	Between groups	4	48.725	12.181	1.589	N.S.*
	Within groups	35	268.250	7.664		
8.	**Working Experience**					
	Between groups	2	19.038	9.519	1.182	N.S.*
	Within groups	37	297.937	8.052		
Event managers						
9.	**Age**					
	Between groups	2	3.043	1.521	0.062	N.S.*
	Within groups	37	910.857	24.618		
10.	**Educational Qualification**					
	Between groups	4	50.108	12.527	0.508	N.S.*
	Within groups	35	863.792	24.680		
11.	**Working Experience**					
	Between groups	2	28.062	14.031	0.586	N.S.*
	Within groups	37	885.838	23.942		

Note: *N.S. = Not Significant, df = Degree of Freedom

The results showed a significant variation in the waste management practices adopted by homemakers with their age, marital status and educational qualification (**Table 32**). The f value was not found

significant for waste management practices of the homemakers with their personal monthly income and family monthly income. Waste management practices adopted by hotel managers and event managers were also not found significant with their age, educational qualification and working experience. Hence, the null hypothesis was partially accepted. It can be concluded that waste management practices adopted by homemakers are influenced by their age, marital status and educational qualification.

Table 33: Scheffe's test showing the mean significance in waste management practices adopted by homemakers with personal variables

Sr. No.	Waste management practices adopted	Mean	df	Level of significance
1.	**Marital status**			
	Married	3.0	36	0.01
	Unmarried	3.0		
	Divorced	3.0		
	Widow	2.8		
Significantly different pairs: 1) Married, Unmarried, Divorced 2) Widow				
2.	**Educational qualification**			
	Below SSC	2.0	35	0.01
	SSC	2.93		
	HSC	3.0		
	Diploma	3.0		
	Graduation	3.0		
	Post Graduation	3.0		
Significantly different pairs: 1) HSC, Diploma, Graduation, Post graduation 2) SSC				
3.	**Age**			
	25-42 Years	3.0	37	0.05
	43-60 Years	2.94		
	61-78 Years	3.0		
Significantly different pairs: 1) 25-42 years, 61-78 years 2) 43-60 years				

df = Degree of Freedom

The statistical analysis in Scheffe's test on various categories of marital status of the homemakers revealed that those homemakers who were Widow significantly differed from homemakers who were Married, Unmarried and Divorced (**Table 33**). Hence, it can be inferred that waste management practices were found good among the

homemakers who were Married, Unmarried and Divorced. Educational qualification of the homemakers who were educated till below 10th significantly differed from those homemakers who were 10th pass, 12th pass, had diploma, Graduation and Post graduation degree. Hence, it can be inferred that waste management practices adopted by homemakers was found higher among those homemakers who were highly educated. Homemakers who were between 43-60 years significantly differed from those homemakers who lied in the range of 25-42 years and 61-78 years. Hence, it can be inferred that waste management practices were found good among the homemakers who were between the age group of 25-42 years and 61-78 years.

$Ho_{2.2}$: There exist no relationship between waste management practices adopted by event organizers and their personal and family variables

To find out a relationship between waste management practices adopted by event organizers and their personal and family variables t-test was computed.

Table 34: t-test showing the difference in the waste management adopted by event organizers with their personal variable and family variable

Sr. no.	Waste management practices adopted	Mean Scores	t value	df	Level of Significance
Homemakers					
1.	**Employment Status**				
	Employed	45.67	0.606	38	N.S.*
	Not Employed	44.52			
2.	**Types of family**				
	Joint family	45.40	0.283	38	N.S.*
	Nuclear family	44.80			

Note: *N.S. = Not Significant, df = Degree of Freedom

The t values were not found significant for waste management practices adopted by the homemakers with their employment status and type of family (**Table 34**). Hence, the null hypothesis was accepted. It was inferred that waste management practice adopted homemakers did not differ with their employment status and type of family.

H_3: There exist a relationship between barriers faced by event organizers in waste management and their selected personal and family variable

This broad hypothesis was made into several specific hypotheses.

$Ho_{3.1}$: There exist no relationship between barriers faced by event organizers in waste management and their selected personal and family variable

To find out the relationship between barriers faced by event organizers in waste management and their selected personal and family variable, ANOVA (f-test) was computed.

The results showed a significant variation in the barriers faced by homemakers in adopting waste management practices with their family monthly income (**Table 35**). Barriers faced by event managers in adopting waste management practices were found significant with their educational qualification. The f value was not found significant for barriers faced by homemakers in adopting waste management practices with their age, educational qualification, marital status and personal monthly income. Barriers faced by hotel managers in adopting waste management practices were also not found significant with their age, educational qualification and working experience. Barriers faced by event managers in adopting waste management practices were also not found significant with their age and working experience. Hence, the null hypothesis was partially accepted. It can be concluded that the barriers faced in adopting waste management practices of homemakers were influenced by their family monthly income and barriers faced in adopting waste management practices of event managers were influenced by their educational qualification.

Table 35: Analysis of variance showing variation in the barriers faced by event organizers in adopting waste management practices by homemakers with their personal and family variable

Sr. no.	Barriers faced in adopting waste management	df	Sum of squares	Mean of squares	F-value	Level of significance
Homemakers						
1.	**Marital Status**					
	Between groups	3	21.785	7.262	1.740	N.S.*
	Within groups	36	150.215	4.173		
2.	**Educational Qualification**					
	Between groups	4	30.506	7.627	1.887	N.S.*
	Within groups	35	141.494	4.043		
3.	**Age**					
	Between groups	2	18.229	9.115	2.193	N.S.*
	Within groups	37	153.771	4.156		
4.	**Personal Monthly income**					
	Between groups	2	7.726	3.863	0.870	N.S.*
	Within groups	37	164.274	4.440		
5.	**Family Monthly Income**					
	Between groups	2	24.752	12.376	0.840	N.S.*
	Within groups	37	147.248	3.980		
Hotel managers						
6.	**Age**					
	Between groups	2	0.419	0.209	0.085	N.S.*
	Within groups	37	91.581	2.475		
7.	**Educational Qualification**					
	Between groups	4	5.943	1.486	0.604	N.S.*
	Within groups	35	86.057	2.459		
8.	**Working Experience**					
	Between groups	2	7.303	3.651	1.595	N.S.*
	Within groups	37	84.697	2.289		
Event managers						
9.	**Age**					
	Between groups	2	12.136	6.068	1.370	N.S.*
	Within groups	37	163.864	4.429		
10.	**Educational Qualification**					
	Between groups	4	54.909	13.727	3.968	0.01
	Within groups	35	121.091	3.460		
11.	**Working Experience**					
	Between groups	2	8.507	4.254	0.940	N.S.*
	Within groups	37	167.493	4.527		

Note: *N.S. = Not Significant, df = Degree of Freedom

Table 36: Scheffe's test showing the mean significance in barriers faced in adopting waste management practices by event managers with their personal variables

Sr. No.	Barriers faced in adopting waste management practices	Mean	df	Level of significance
1.	**Educational qualification**			
	Diploma	9.0	35	0.01
	Graduation	10.0		
	Post Graduation	13.0		
Significantly differed pairs: 1) Post graduation 2) Graduation				

df = Degree of Freedom

The statistical analysis in Scheffe's test on various categories educational qualification of the event managers revealed that those event managers who had diploma differed from those event managers who had Graduation and Post graduation degree (**Table 36**). Hence, it can be inferred that barriers faced in adopting waste management practices by event managers was found higher among those event managers who were highly educated.

$Ho_{3.2}$: There exist no relationship between barriers faced by event organizers in waste management and their selected personal and family variable

To find out the relationship between barriers faced by event organizers in waste management and their selected personal and family variable t-test was computed.

Table 37: t-test showing the difference in the barriers faced in adopting waste management practices by event organizers with their personal and family variable

Sr. no.	Barriers faced in adopting waste management by homemakers	Mean Scores	t value	df	Level of Significance
Homemaker					
1.	**Employment Status**				
	Employed	20.93	1.011	38	N.S.*
	Not Employed	20.24			
2.	**Type of family**				
	Joint family	20.20	-0.517	38	N.S.*
	Nuclear family	20.60			

The t values were not found significant for barriers faced in adopting waste management practices by homemakers with their employment status and type of family (**Table 37**). Hence, the null hypothesis was accepted. It was inferred that barriers faced in adopting waste management practices of homemakers did not differ with their employment status and type of family.

H_4: There exist a relationship between extent of awareness of event organizers regarding waste management and waste management practices adopted by them

This broad hypothesis was made into several specific hypotheses.

Ho_4: There exist no relationship between extent of awareness of event organizers regarding waste management and waste management practices adopted by them

To find out the relationship between extent of awareness of respondents regarding waste management and waste management practices adopted by them, Co-efficient of correlation was computed.

Table 38: Co-efficient of correlation showing relationship between awareness of event organizers regarding waste management and waste management practices adopted by them

Sr. no.	Event organizers	Selected Variables	n	r-value	Level of Significance
1.	Homemakers	Awareness regarding waste management	40	0.386	0.05
		Waste management practices			
2.	Hotel managers	Awareness regarding waste management	40	0.105	N.S.*
		Waste management practices			
3.	Event managers	Awareness regarding waste management	40	0.267	N.S.*
		Waste management practices			

Note: *N.S. = Not Significant, df = Degree of Freedom

A significant relationship was found between awareness regarding waste management and waste management practices of homemakers

(**Table 38**). No significant relationship was found between awareness regarding waste management of hotel managers and event managers with their waste management practices. Hence, the null hypothesis was partially accepted. It can be said that awareness regarding waste management have influence on waste management practices adopted.

H_5: There exists a relationship between waste management practices adopted by event organizers and barriers faced in waste management

This broad hypothesis was made into several specific hypotheses.

Ho_5: There exists no relationship between waste management practices adopted by event organizers and barriers faced in waste management

To find out the relationship between waste management practices adopted by event organizers and barriers faced in waste management, Co-efficient of correlation was computed.

Table 39: Co-efficient of correlation showing relationship between waste management practices adopted by event organizers and barriers faced in waste management

Sr. no.	Event organizers	Selected Variables	n	r-value	Level of Significance
1.	Homemakers	Waste management practices Barriers faced in waste management	40	0.068	N.S.*
2.	Hotel managers	Waste management practices Barriers faced in waste management	40	-0.933	0.01
3.	Event managers	Waste management practices Barriers faced in waste management	40	0.162	N.S.*

Note: *N.S. = Not Significant, df = Degree of Freedom

An inverse relationship was found between waste management practices adopted by hotel manager and barriers faced in adopting waste management practices (**Table 39**). Hence, the null hypothesis was partially accepted. It can be inferred that the practices of waste management can be improved if the barriers are less. It can also be said that less barrier can lead to good waste management practices.

Conclusion

A significant variation was found between the awareness of the homemakers and event managers regarding waste management and educational qualification. There was a significant variation between waste management practices adopted by homemakers with their marital status, age and educational qualification. A significant variation between the barriers faced in adopting waste management practices by homemakers with their family monthly income and barriers faced in adopting waste management practices by event managers with their educational qualification. It could be concluded that the barriers faced in adopting waste management practices by event managers was found significant with their educational qualification. A significant relationship was found between awareness regarding waste management and waste management practices of homemakers. A significant relationship was found between waste management practices adopted by hotel manager and barriers faced in adopting waste management practices.

The statistical analysis in Scheffe's test on various categories of marital status of the homemakers revealed that those homemakers who were Widow significantly differed from homemakers who were Married, Unmarried and Divorced, educational qualification of the homemakers who were educated till below 10^{th} significantly differed from those homemakers who were 10^{th} pass, 12^{th} pass, had diploma, Graduation and Post graduation degree, educational qualification of the event managers revealed that those event managers who had diploma in related fields significantly differed from those event managers who had Graduation and Post graduation degree and educational qualification

of the event managers revealed that those event managers who had diploma differed from those event managers who had Graduation and Post graduation degree.

Hence, it is clear that education to raise awareness is fundamental for better waste management practices. Higher the education results in better waste management practices. Waste management Practices adopted by event organizers depends on the extent of Awareness they have. Despite of high extent of awareness among event organizers, the waste management practices were found moderate If event organizers adopt waste management practices aimed at the reuse and recycling of waste that has already been created, as well as recovery of energy from such garbage, the volume of the waste generated might be significantly decreased. Local government should incentivize event organizers financially by providing effective recycling services more cheaply than landfill to encourage them towards waste reduction and recycling.

Section VII

4.7 Audio-Visual Aid

In order to accomplish the objectives of the research, an audio visual aid was developed.

As the findings of the study revealed that respondents were aware about waste management but their waste management practices were moderate. It might be due to barriers faced by them in waste management. Therefore, an attempt was made to overcome the barriers of the event organizers, by introducing them to the avenues of waste management available in Vadodara city. An outline of the video was finalized. The researcher contacted the owners and experts for their consent. The objectives of the research were shared. The results were discussed with them and they were asked to talk about methods of waste management. The preferable time of the experts were taken Contacted. The recording began on consented date and time of the experts.

The researcher went to different places where the events were held in order to get picture of the waste generated after events. The script was finalized accordingly. The researcher took help of professionals for voice over and final editing. Initially the video recorded was of 30 minutes which are made to 11 minutes 34 seconds after final editing. The final video was uploaded of youtube for creating awareness about local sources where waste can be managed.

Plate 4: Screenshot of title sequence of an Audio-visual aid

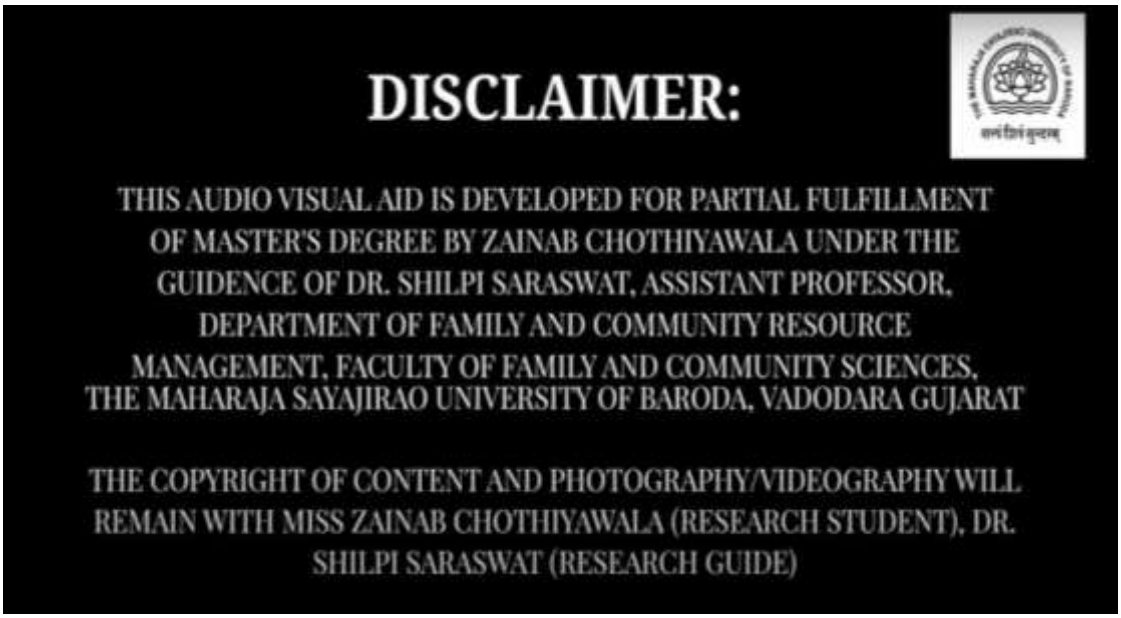


Plate 5: Screenshot of disclaimer of an Audio-visual aid

Plate 6: Screenshot of information shared by Mr. Suneet Dabke about composters and recyclable plastic products

Plate 7: Screenshot of information shared by Prof. Nitin Bhate, MSU and Asst. Prof. Rushil Bhatt, MSU about the polymer laboratory, crusher and recyclable PET bottles

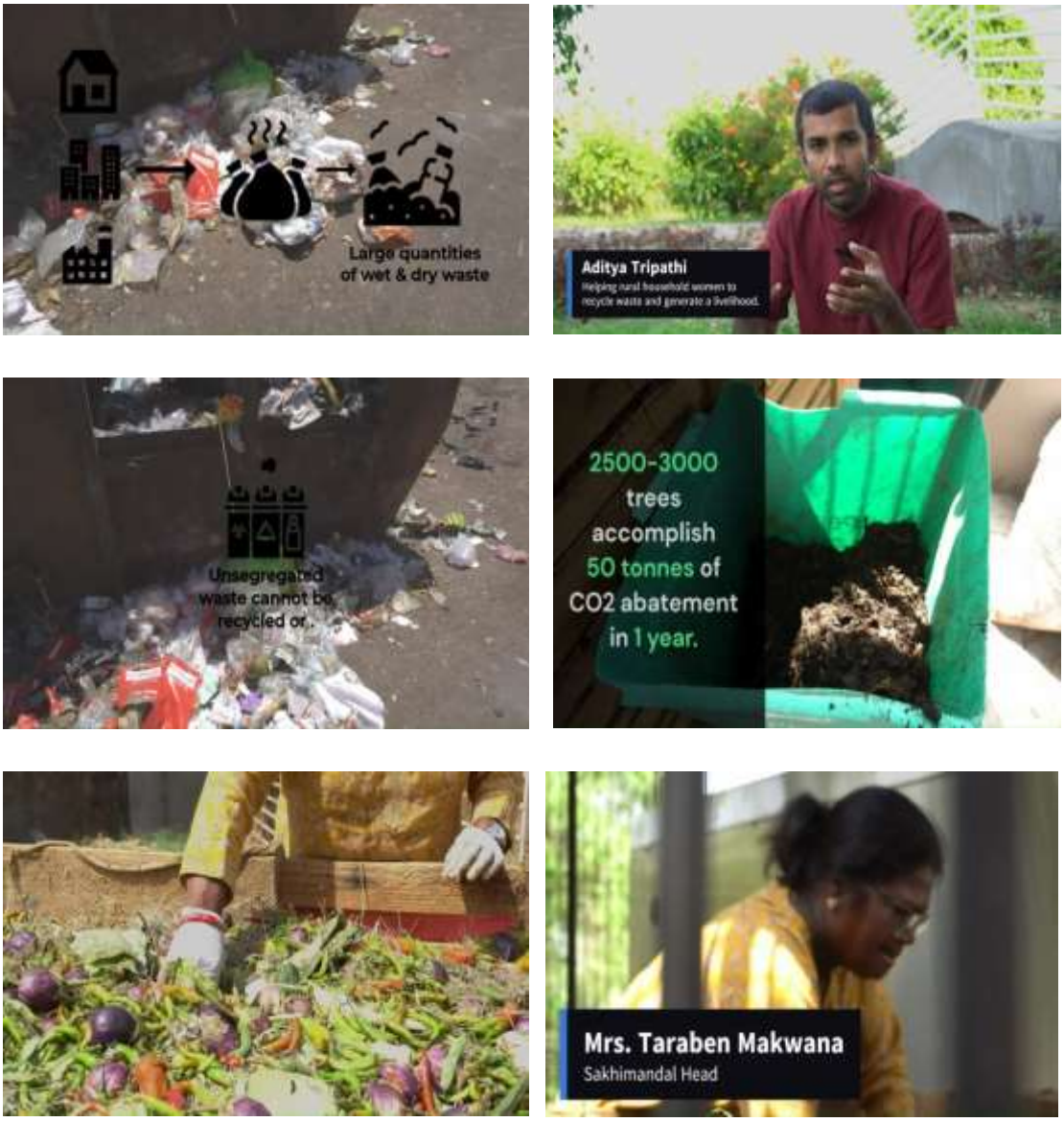


Plate 8: Screenshot of information shared by Mr.Aditya Tripathi and Mrs. Taraben Makwana about composting, waste bins and composting unit

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Event management is an integral part of human life, and waste management is a serious issue that needs public awareness and guidance. Waste is harmful to the environment and human health. This study aims to assess the extent of awareness of event organizers about waste management, to find out waste management practices adopted by event organizers and extent of barriers faced in adopting waste management practices. The study also aims to develop an audio-visual aid focusing on methods waste management.

After reviewing related researches it was found that researches focused on Sustainable event management, Solid waste management, Solid waste composition, Environmental awareness of hotel employees, Green practices in hotel, Recycling potential of Municipal solid waste, Waste generation by hospitality industry, Event waste management, Food waste management, Eco-friendly behavior and environmental performance of hotel, Total waste management, Sustainable solid waste management, Environment friendly practices of hotel employees and Event management by homemakers. Researcher had yet not come across the study on similar subject in India. Despite the fact that the genre appeared to be highly interesting, there was a paucity of researches on Event waste management and awareness of event organizers regarding waste management, waste management practices adopted by event organizers and barriers faced in adopting waste management practices.

Courses such as “Ecology and Environment” and “Event Management” are among thrust areas of the field of Family and Community Resource Management. Hence, information gathered through the present research would widen the database and will help in making modifications in curriculum, if needed. The study focuses on developing audio visual aid which will be beneficial to everyone who organizes or are going to organize events in future. Awareness regarding event waste management entails conscious steps to reduce waste, therefore the present study emphasize on waste management at source.

Statement of Problem

The present study aims to ascertain the extent of awareness of event organizers regarding waste management, their waste management practices and barriers faced.

Objectives of the study

1. To ascertain the type of waste generated after the events.
2. To assess the extent of awareness of the event organizers regarding waste management.
3. To find out the waste management practices adopted by the event organizers.
4. To find out the extent of barriers faced in waste management.
5. To develop audio visual aid suggesting methods of waste management.

Delimitations

1. The study was limited to events organized between November, 2022 to January, 2023.
2. The study was limited to events where gathering is more than or equal to 50 guest.

Hypotheses of the study

1. There exist a relationship between awareness of respondents regarding waste management and their selected personal and family variable.
2. There exist a relationship between waste management practices adopted by event organizers and their personal and family variables.
3. There exist a relationship between barriers faced by event organizers in adopting waste management practices and their selected personal and family variable.

4. There exist a relationship between extent of awareness of respondents regarding waste management and waste management practices adopted by event organizers.
5. There exist a relationship between waste management practices adopted by event organizers and extent of barriers faced in adopting waste management practices.

Methodology

The research design for present research was descriptive in nature. Stratified random sampling was used to select samples. The three strata identified were Homemakers, Hotel managers, Event managers. For selecting homemakers, few residential societies were identified and 40 homemakers who organizes events were selected randomly. For selecting hotel and event managers, 40 hotel managers and 40 event managers were randomly selected from the list of existing hotels and event management companies in Vadodara city. The researcher approached these hotels and event management companies for seeking consent for collecting data.

Interview schedule was developed as a tool of data collection. Interview schedule contained information related to background information, organizational details and types of events organized by event organizers. Apart from background information, it comprised of five sections viz. “Types of waste generated after events”, “Extent of awareness of event organizers regarding waste management”, “Waste management practices adopted by event organizers”, “Extent of barriers faced in adopting waste management practices”. The awareness scale was a summated scale of likert type showing awareness of event organizers regarding waste management. It included four dimensions as subsections namely, prevention and minimization, reuse, recycle and recovery and disposal methods as methods as waste management. It consists of 22 statements, which had 11 positive and 11 negative statements. It had 3 point continuum for the responses “Agree”, “Undecided” and “Disagree” which were scored 3 through 1 respectively to the positive statements. The scores were reversed in case of negative statements. Higher scores reflected high extent of awareness of event

organizer regarding waste management. The scale “Waste management practices adopted by event organizers” consisted of 21 statements regarding waste management practices adopted by event organizers. It had 3 point continuum for the responses “Always”, “Sometimes” and “Never” which were scored 3 through 1 respectively. Higher scores reflected good practices adopted by event organizer for waste management. The scale “Extent of barriers faced in adopting waste management practices”, has summated rating scale where 8 barriers were listed and respndents were asked to state the extent to which they face “Major Barrier”, “Minor Barrier” and “Not a Barrier”. The score ascribed were 3 through 1 respectively. Higher score will revealed high extent of barriers faced in waste management.

The content validity was established for the scales prepared by the researcher to test the content validity. It was given to the panel of 8 judges, from Department of Family and Community Resource Management, Faculty of Family and Community Sciences. The Maharaja Sayajirao University of Baroda, Vadodara. They were requested to check the clarity and relevance of the content for each scale. They were also requested to state whether each statement fell in the category under which it was listed. No changes were required to be made in the final tool. The reliability of the scales were established through split-half method methods of establishing reliability. The Cronbach’s alpha test was applied on random 30 sample. The reliability coefficient derived for the scales awareness of event organizers regarding waste management, waste management practices adopted by event organizers and barriers faced in adopting waste management practices were 0.389, 0843 and 0.545 respectively. The data were analysed using descriptive statistics (Frequency, percentage and mean) and relational statistics i.e. Analysis of Variance (ANOVA), “t-test” and Co-efficient of Correlation were applied accordingly to the nature of the variables.

Major Findings

The major findings of the study are presented here.

Section I Background Information

Background Information of Homemakers: The mean age of the respondent as homemakers was 42.35 years. Little less than one-half (47.5%) of the respondents as homemakers were in the age group of 25 to 42 years. Equal percentage of respondents as homemakers were below SSC (27.5%) and graduate (27.5%). Little more than three-fourth (77.5%) of respondents as homemakers were married. The employment status of the homemakers revealed that little less than two-third (62.5%) of the respondents were not employed. The mean personal monthly income of the respondents as homemakers was ₹ 7,750. Three-fourth (75%) of the respondents as homemakers belonged to nuclear family. The mean family monthly income of the respondents as homemakers was ₹ 36,925. Majority of types of events organized by the respondents as homemakers was get together as informal event.

Background Information of Hotel Managers: The mean age of the hotel managers was 45.78 years. More than two-third (37.5%) of the respondents as hotel managers were in the age group of 44 to 48 years. The educational qualification of the respondents as hotel managers were graduates. The mean of working experience of the respondents as hotel managers was 21.5 years. One-half (50%) of the respondents as hotel managers were having working experience between 18 to 28 years. The mean of years of establishment of the hotel was 24.8 years. Three-fourth (75%) of them were working in the hotel established between 6-36 years. More than One-half (52.5%) of them were working in the small size hotel. Almost two-third (65%) of the respondents as hotel managers were working in 4 star hotel. Majority (92.5%) of them were not having any kind of in-house waste disposal facility. Types of events organized by the respondents as hotel managers in majority were informal event. All the hotel managers organized Weddings, anniversary party, engagement party, baby shower party, farewell party, surprise party, birthday party, welcome party, get together and musical events.

Background Information of Event Managers: The mean age of the event managers was 38.88 years. More than one-third (40%) of the respondents as

event managers were in the age group of 43 to 50 years. The educational qualification of the respondents as event managers was graduates. The mean working experience of the event managers was 14.65 years. More than one-half (52.5%) of them had working experience between 5 to 13 years. The mean years of establishment of the event management companies was 13.65 years. Lille less than two-third (65%) of them were working in the event management company established between 1-13 years. Majority (95%) of them were not having any kind of in-house waste disposal facility. Types of event organized by event managers in majority were informal events. All the event managers organized engagement party, birthday party, welcome party, get together and religious events.

Section II Types of waste generated after events

In this section the respondents stated the types of waste generated after the events. All the respondents as homemakers stated that the wastes generated after the event were plastic waste and food waste. All the respondents as hotel managers stated that the waste generated after the event were paper waste, plastic waste, food waste and flower waste. All the respondents as event managers stated that the waste generated after the event were paper waste, plastic waste and food waste.

Section III Extent of Awareness of event organizers regarding waste management

In this section respondents were asked to state whether they were aware about the waste management. It was found that homemakers and event managers had high extent of awareness regarding waste management.

Section IV Waste management practices adopted by Event organizers

It was found that here the weighted mean scores were high for event managers. This shows that the waste management practices of event managers were good as compared to hotel managers and homemakers. It was also found that homemakers, hotel managers and event managers adopted moderate waste management practices.

Section V Extent of Barriers faced in Adopting Waste Management Practices

It was found that here the weighted mean scores were high for event managers. This shows that hotel management faced high extent of barriers faced in adopting waste management practices as compared to event managers and homemakers. It was also observed that hotel managers, event managers and homemakers faced high extent of barriers faced in adopting waste management practices.

Section VI Testing of Hypotheses

- A significant relationship was found between extent of awareness of the homemakers and event managers regarding waste management and their educational qualification.
- A significant relationship was found between waste management practices adopted by homemakers with their age, marital status and educational qualification.
- A significant relationship was found between extent of barriers faced by event managers in adopting waste management practices with their educational qualification.
- A significant relationship was found between extent of awareness regarding waste management and waste management practices of homemakers.
- A significant relationship was found between waste management practices adopted by hotel manager and extent of barriers faced in adopting waste management practices.
- The statistical analysis in scheffe's test revealed that educational qualification of those homemakers who were educated till higher secondary differed from homemakers who were educated till SSC, below SSC, diploma, graduation and post graduation.
- The statistical analysis in scheffe's test revealed that educational qualification of those event managers who had diploma in related fields significantly differed from those event managers who had graduation and post graduation degree.

- The statistical analysis in scheffe's test revealed that marital status of those homemakers who were widow significantly differed from homemakers who were married, unmarried and divorced.
- The statistical analysis in scheffe's test revealed that educational qualification of those event organizers who were educated below SSC significantly differed from those homemakers who were educated till SSC, HSC had diploma, graduation and post graduation degree.
- The statistical analysis in scheffe's test revealed that homemakers who were between 43-60 years significantly differed from those homemakers who lied in the range of 25-42 years and 61-78 years.
- The statistical analysis in scheffe's test revealed that educational qualification of those event managers who had diploma in related fields significantly differed from those event managers who had graduation and post graduation degree.

Conclusion

The data were collected regarding personal information, family information and organizational details of the respondents. The extent of awareness regarding waste management, waste management practices adopted by event organizers and extent of barriers faced in adopting waste management practices were analyzed. The results showed that the mean age of homemakers was 42.35 years, homemakers were educated below 10^{th} and were graduates and married. It was found that homemakers did not had any personal monthly income as they were not employed outside. It was found that homemakers belonged to nuclear family and the total family monthly income ranged between ₹18000 to ₹ 64000 with the mean of ₹ 36,925. The age of the hotel managers ranged between 38-54 years with the mean age of 45.78 years. Majority of hotel managers were graduates, with 7 to 39 years of working experience. The hotel managers were working in the hotel established between 6-36 years in small size hotel. Most of them were working in 4 star hotel and majority of them had waste bins as in-house waste disposal facility. The age of the event managers ranged between 26 to 50 years with the mean age of 38.88 years. Majority of event managers were graduates. Event managers had working experience between 5 to 13 years.

They were working in the companies established between 1-13 years. Types of events organized by event organizers were categorized in two categories, formal events and informal events. It was found that homemakers usually organizes informal events while hotel managers and event managers organizes both types of events Types of waste generated after all the events organized by event organizers were plastic waste and food waste. It was also found that homemakers and event managers had high extent of awareness regarding waste management. The waste management practices of all the Event organizers were moderate. High extents of barriers were faced by all the event organizers. An audio visual aid prepared by the researcher can prove beneficial in creating awareness among several stakeholders. It also focused on course of action that one can take in handling and disposing waste. The opportunities available in Vadodara city for handling waste were highlighted in the video.

Implications of the study

The findings of the present study had the following implications:

For the field of Family and Community Resource Management

The field of Family and Community Resource Management has “Ecology and Environment” and “Event Management” as subjects offered to the students at each level of study. The findings of the study would widen the data base and will help in making modifications in curriculum, if needed. The students of department are future stakeholders and hence can consider adopting effective waste management strategies for the events they organize.

For the Hotel managers and Event Managers

Considering the nature of work of hotels and event management companies, they are bound to provide best services for maximum satisfaction of customers. But they are bound to generate considerable amount of waste. The findings revealed that the waste management practices of hotel managers and event managers were moderate. Therefore, waste management practices is a serious agenda that needs awareness and administrative attention along with the guidance they require, commitment of the management and staff to manage their waste by sparing time and

formulating administrative policies for adopting waste management strategies. Event organizers can undertake waste audit, they can work with contracted waste management companies and can encourage staff in participating in the waste management training program, and create awareness among the staff. Restaurant Association of India and Environment Protection Agency on Waste Management can undertake effective programs for enhancing awareness and practices of event organizers.

For the Homemakers

Homemakers plays a pivotal role in household management, she is the key decision maker and plays managerial roles in day to day events as well as for special events. Effective waste management depends on her awareness and practices regarding the same. As revealed from the findings that awareness of homemakers regarding waste management and waste management practices were found to be at moderate level. Hence, an audio-visual aid prepared can enhance their awareness and can upgrade their practices related to waste management.

For Government and Local Authorities

The government is not just the protector of the country's environment but also have major responsibility for sustaining environmental conscience. The government has laid down several rules, regulations for waste management. But they are not successful to incentivize and impose a strict penalty in case of poor implementation. The finding outstated that even organizers faced lots of barriers in terms of appropriate equipment, space, funds. Here the government can play an important role by providing facilities or equipment on hire on concessional rates for recycling or composting. The collective efforts of government and Hotel Management Association and well as Municipal Corporation in creating awareness can work well in effective waste management. Hotel management and governing agencies must encourage attitudinal change among both the staff and other stakeholder. Waste management methods need huge quantity of investment to carry out the practices such as the expenditure of transferring waste to recycling plant, construction of recycling plant, obtaining of extra dustbins for waste

segregation, and the acquisition of composter, biogas plant, and sewage transplant plants. The government can collaborate with local leaders or self-help groups who can help in fulfilling the gaps and planning an effective strategies based on requirements at grass root level. Therefore, local government should incentivize event organizers financially by providing effective recycling services more cheaply than landfill to encourage them towards waste reduction and recycling

Recommendations for the Future Studies

1. A similar study can be undertaken in other cities of Gujarat or different states in India
2. A similar study can be conducted on a larger sample size.
3. A comparative study can be conducted between two cities of any state in India.
4. A research can be undertaken to assess the type and quantity of waste generated after the organization of religious and cultural events in the city.
5. A research can be carried out to ascertain the waste management practices of youth at their end.

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[1] https://www.justdial.com/Vadodara/Event-Organisers/nct-10194150

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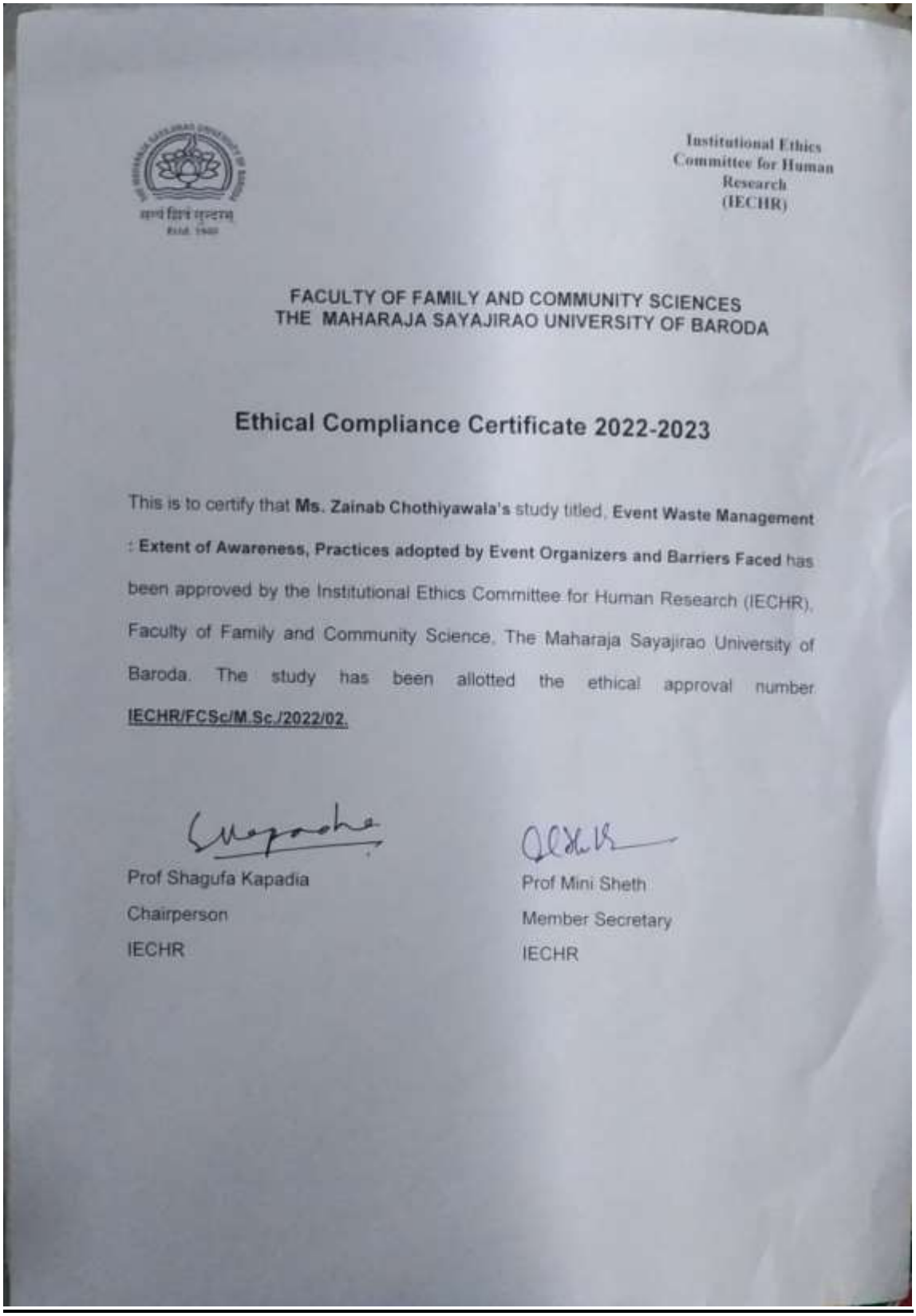
APPENDIX I



Institutional Ethics Committee for Human Research (IECHR)

FACULTY OF FAMILY AND COMMUNITY SCIENCES
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA

Ethical Compliance Certificate 2022-2023

This is to certify that **Ms. Zainab Chothiyawala's** study titled, **Event Waste Management : Extent of Awareness, Practices adopted by Event Organizers and Barriers Faced** has been approved by the Institutional Ethics Committee for Human Research (IECHR), Faculty of Family and Community Science, The Maharaja Sayajirao University of Baroda. The study has been allotted the ethical approval number **IECHR/FCSc/M.Sc./2022/02.**

Prof Shagufa Kapadia
Chairperson
IECHR

Prof Mini Sheth
Member Secretary
IECHR

APPENDIX II

Estd. 1949
ACCREDITED GRADE 'A+' BY NAAC
DEPARTMENT OF FAMILY & COMMUNITY RESOURCE MANAGEMENT
FACULTY OF FAMILY AND COMMUNITY SCIENCES
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA
VADODARA

PERMISSION LETTER

Respected Sir/Ma'am,

I Zainab Chothiyawala, M.Sc. 2nd year student of Department of Family and Community Resource Management at the Maharaja Sayajirao University of Baroda, Gujarat. For the partial fulfillment of my master's degree, I am conducting research on "**EVENT WASTE MANAGEMENT: EXTENT OF AWARENESS AND PRATICES ADOPTED BY EVENT ORGANIZERS**".

The objectives of the study are:

- To ascertain the type of waste generated after the events.
- To assess the awareness of the event organizers regarding waste management.
- To find out the waste management practices adopted by the event organizers.
- To find out the barriers faced in adopting waste management.
- To develop audio visual aid for suggesting methods of waste management.

In order to collect data, we need the responses from the event organizers. All efforts to protect your identity and keep the information confidential will be taken. Only the researcher has access to the responses. Your organization name will only be used to contact managers and will not be associated with any research findings.

If you have any further questions concerning this study, please feel free to contact me through- Phone no: 9998265402
Email ID: Chothiyawalazainab786@gmail.com
To participate, please tick on "I Agree".
o I AGREE
o I DISAGREE

Your permission will be greatly appreciated.
Signature of the Event Organizer: _____

Zainab Chothiyawala
M.Sc. (F.C.Sc.) Student
Department of FCRM
FFCSc, MSU

Dr. Shilpi Saraswat
Supervisor & Assistant Professor
Department of FCRM
FFCSc, MSU

APPENDIX III

Estd. 1949
ACCREDITED GRADE 'A+' BY NAAC
DEPARTMENT OF FAMILY & COMMUNITY RESOURCE MANAGEMENT
FACULTY OF FAMILY AND COMMUNITY SCIENCES
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA
VADODARA

INFORMED CONSENT FORM FOR HOMEMAKERS

The Department of Family and Community Resource Management, Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda, Vadodara, supports the practice of protection of human participants in research. The following will provide you with information about the research survey that will help you decide whether or not you wish to participate. If you agree to participate, please be aware that you are free to withdraw at any point throughout the duration of the research without any penalty. In this study you will be asked about Background information (Age, Educational qualification, Employment status, Personal monthly income, Marital status, Type of family and Family monthly income), Extent of awareness regarding waste management, Waste management practices adopted and Extent of barriers faced in waste management. All the information provided by you will remain confidential and will not be associated with your name. If for any reason during this study you do not feel comfortable, you may leave the study. Your participation in this study will require approximately 15-20 minutes. If you have any further questions concerning this research, please feel free to contact Ms. Zainab Chothiyawala through Phone +91 9998265402 email id: chothiyawalazainab786@gmail.com.

Please indicate with your signature on the space below that you understand what participation in the study involves and agree to participate. Your participation is strictly voluntary. All information will be kept confidential and your name will not be associated with any research findings.

_____

Name & Signature of the Participant

Zainab Chothiyawala
M.Sc. (F.C.Sc.) Student
Department of FCRM
FFCSc, MSU

Dr. Shilpi Saraswat
Supervisor & Assistant Professor
Department of FCRM
FFCSc, MSU

APPENDIX IV

Estd. 1949
ACCREDITED GRADE 'A+' BY NAAC
DEPARTMENT OF FAMILY & COMMUNITY RESOURCE MANAGEMENT
FACULTY OF FAMILY AND COMMUNITY SCIENCES
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA
VADODARA

INFORMED CONSENT FORM FOR HOTEL MANAGERS

The Department of Family and Community Resource Management, Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda, Vadodara, supports the practice of protection of human participants in research. The following will provide you with information about the research survey that will help you decide whether or not you wish to participate. If you agree to participate, please be aware that you are free to withdraw at any point throughout the duration of the research without any penalty. In this study you will be asked about Background information (Age, Educational qualification, Gender and Working experience), Extent of awareness regarding waste management, Waste management practices adopted by event organizers and Extent of barriers faced in waste management. All the information provided by you will remain confidential and will not be associated with your name. If for any reason during this study you do not feel comfortable, you may leave the study. Your participation in this study will require approximately 15-20 minutes. If you have any further questions concerning this research, please feel free to contact Ms. Zainab Chothiyawala through Phone +91 9998265402 email id: chothiyawalazainab786@gmail.com.

Please indicate with your signature on the space below that you understand what participation in the study involves and agree to participate. Your participation is strictly voluntary. All information will be kept confidential and your name will not be associated with any research findings.

_____

Name & Signature of the Participant

Zainab Chothiyawala
M.Sc. (F.C.Sc.) Student
Department of FCRM
FFCSc, MSU

Dr. Shilpi Saraswat
Supervisor & Assistant Professor
Department of FCRM
FFCSc, MSU

APPENDIX V

Estd. 1949
ACCREDITED GRADE 'A+' BY NAAC
DEPARTMENT OF FAMILY & COMMUNITY RESOURCE MANAGEMENT
FACULTY OF FAMILY AND COMMUNITY SCIENCES
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA
VADODARA

INFORMED CONSENT FORM FOR EVENT MANAGERS

The Department of Family and Community Resource Management, Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda, Vadodara, supports the practice of protection of human participants in research. The following will provide you with information about the research survey that will help you decide whether or not you wish to participate. If you agree to participate, please be aware that you are free to withdraw at any point throughout the duration of the research without any penalty. In this study you will be asked about Background information (Age, Educational qualification, Gender and Working experience), Extent of awareness regarding waste management, Waste management practices adopted by event organizers and Extent of barriers faced in waste management. All the information provided by you will remain confidential and will not be associated with your name. If for any reason during this study you do not feel comfortable, you may leave the study. Your participation in this study will require approximately 15-20 minutes. If you have any further questions concerning this research, please feel free to contact Ms. Zainab Chothiyawala through Phone +91 9998265402 email id: chothiyawalazainab786@gmail.com.

Please indicate with your signature on the space below that you understand what participation in the study involves and agree to participate. Your participation is strictly voluntary. All information will be kept confidential and your name will not be associated with any research findings.

_____

Name & Signature of the Participant

Zainab Chothiyawala
M.Sc. (F.C.Sc.) Student
Department of FCRM
FFCSc, MSU

Dr. Shilpi Saraswat
Supervisor & Assistant Professor
Department of FCRM
FFCSc, MSU

APPENDIX VI

Interview Schedule

SECTION I. BACKGROUND INFORMATION OF RESPONDENTS

(A) Background information of Homemakers

1. Name _____
2. Age (in years) _____
3. Educational Qualification
    - 10^{th} pass
    - 12^{th} pass
    - Diploma
    - Graduation
    - Post- Graduation
    - Other: _____
4. Marital Status
    - Married
    - Unmarried
    - Divorced
    - Widow
5. Employment Status
    - Employed
    - Not Employed
6. Personal Income (in ₹) _____
7. Type of Family
    - Joint Family
    - Nuclear Family
8. Family Income (in ₹) _____

(B) What types of events do you organize at home?

○ Kitty Parties
○ Musical Event (Sangeet)
○ Religious Event
○ Birthday Party
○ Surprise Party
○ Engagement Party
○ Cocktail Party
○ Get together
○ Children Get together
○ Anniversary Party
○ Baby shower Party
○ New Year Party
○ Others

SECTION I. BACKGROUND INFORMATION OF RESPONDENTS

(A) Background information of Hotel Managers

1. Name _____
2. Age (in years) _____
3. Educational Qualification
    - 10^{th} pass
    - 12^{th} pass
    - Diploma
    - Graduation
    - Post- Graduation
    - Other: _____
4. Working Experience: _____

(B) Organizational Details

1. Name of the Hotel: _____
2. Years of establishment of the Hotel: _____
3. Size of the Hotel: _____
4. Star rating of the Hotel: _____
5. Any in-house waste disposal facility to dispose of the waste is available?
    - Waste bins
    - Composting unit
    - Biogas plant
    - Organic waste container
    - Incineration
    - Sanitary landfill
    - Others: _____

6. What types of events are organized in the Hotel:

Formal Events
○ Meetings
○ Conferences
○ Exhibition
○ Seminars
○ Product Launching
○ Annual Celebration
○ Promotional Events

Informal Events
○ New Year Party
○ Weddings
○ Anniversary Party
○ Engagement Party
○ Baby shower Party
○ Farewell Party
○ Surprise Party
○ Birthday party
○ Welcome party
○ Get together
○ Religious Event
○ Cocktail Party
○ Musical Event

SECTION I. BACKGROUND INFORMATION OF RESPONDENTS

(A) Background information of Event Managers

1. Name _____
2. Age (in years) _____
3. Educational Qualification
    - 10^{th} pass
    - 12^{th} pass
    - Diploma
    - Graduation
    - Post- Graduation
    - Other: _____
4. Working Experience: _____

(B) Organizational Details

1. Name of the Organization: _____
2. Years of establishment of the Organization: _____
3. Any in-house waste disposal facility to dispose of the waste is available?
    - Waste bins
    - Composting unit
    - Biogas plant
    - Organic waste container
    - Incineration
    - Sanitary landfill
    - Others: _____
4. What types of events are organized in the Organization:

Formal Events
○ Meetings
○ Conferences
○ Exhibition
○ Seminars
○ Product Launching
○ Annual Celebration
○ Promotional Events

Informal Events
○ New Year Party
○ Weddings
○ Anniversary Party
○ Engagement Party
○ Baby shower Party
○ Farewell Party
○ Surprise Party
○ Birthday Party
○ Welcome Party
○ Get together
○ Religious event
○ Cocktail Party
○ Musical event

SECTION II Types of waste generated after the events

1. What type of waste is generally generated after the events organized by you?
    - Paper Waste
    - Plastic Waste
    - Food Waste
    - Flower Waste
    - Water Waste
    - Wood Waste
    - Metal Waste
    - Cloth Waste
    - Others: _____

SECTION III Awareness of the event organizers regarding waste management

The following are the statements regarding Awareness of waste management. The statements will be analyzed through a response structure which would be 'Agree', 'Undecided' and 'Disagree'.

Please go through the following and put [✓] tick mark in the appropriate column and state whether the statements are:

Sr. No.	Statements regarding waste management	Agree	Undecided	Disagree
A.	**Prevention and Minimization**			
1.(+)	Prevention is the elimination of waste before it is actually created			
2.(+)	Minimization is the reduction of waste during the life cycle of the product			
3.(-)	Minimization means eliminating the use of product			
4.(-)	Using single use plastic helps in reducing waste			
5. (-)	Waste prevention is not a useful step in waste management			

Sr. No.	Statements regarding waste management	Agree	Undecided	Disagree
B.	**Reuse**			
1.(+)	Reuse is a process of putting waste materials back into use instead of discarding them			
2.(-)	Paper waste cannot be reused			
3.(+)	Flower waste can be used to make incense stick			
4.(-)	Plastic bottles cannot be reused for refilling water			
5.(+)	Reusable resources such as furniture, Kitchenware, games, props, hangings e.t.c. can be donated as charity			
6.(+)	Waste table cloths or napkins can be reused as wipes to clean surfaces			
C.	**Recycle and Recovery**			
1.(+)	Recycling of waste is one of the disposal method			
2.(+)	Recovery is the retrieval of a part of the value of the materials through recycling			
3.(-)	It is difficult to recycle decorative items made from wood			
4.(+)	Recycling of waste can conserve natural resources and reduces pollution			
D.	**Disposal**			
1.(+)	Waste can be disposed by using Chemical and Biological treatment methods			
2.(+)	Pyrolysis method is the heating of an organic material, such as biomass, in the absence of oxygen			
3.(-)	Food waste cannot be sent for animal feed			
4.(-)	Waste can be thrown in drains			
5.(-)	Waste disposal on open places are not harmful for human health			
6.(-)	Landfilling method of waste disposal is least used method			
7.(-)	Waste can be thrown anywhere in the open grounds			

SECTION IV Waste management practices adopted by the event organizers

The following are the statements regarding Waste management practices adopted by event organizers. The statements will be analyzed through a response structure which would be 'Always', 'Sometimes' and 'Never'.

Please go through the following statement and put [✓] tick mark in the appropriate column and state whether the statements are:

Sr. no.	Statements regarding waste management practices	Always	Sometimes	Never
1.	Segregate wet and dry waste			
2.	Segregate bio-degradable and non-biodegradable wastes			
3.	Collect the waste in separate containers			
4.	Containers are emptied regularly			
5.	Waste is sent to landfills			
6.	Organic waste is used for making compost			
7.	Plastic waste is sent for recycling			
8.	Metal waste is sent for recycling			
9.	Waste is sent for thermal treatment			
10.	Food waste is sent for animal feed			
11.	Purchase recyclable materials			
12.	Using reusable tableware			
13.	Purchase products in bulk to reduce the need for packaging			
14.	Purchase supplies in reusable containers (Flowers, Food e.t.c.)			
15.	Printing on both sides of paper to reduce paper waste (Broachers for advertisement or cards)			
16.	Repairing broken equipment instead of purchasing a new one			
17.	Donating leftover food to charity to reduce waste			
18.	Waste which is not segregated is burned			
19.	Throw waste to drain			

Sr. no.	Statements regarding waste management practices	Always	Sometimes	Never
20.	Keep all the garbage in one garbage container.			
21.	Use wastewater in for watering plants			

SECTION V Barriers faced in adopting waste management practices

The following are the statements regarding Barriers of waste management. The statements will be analyzed through a response structure which would be 'Major Barrier', 'Minor Barrier' and 'Not a Barrier'.

Please go through the following and put [✓] tick mark in the appropriate column and state whether the statements are:

Sr. No.	Statements regarding barriers of waste management	Major Barrier	Minor Barrier	Not a Barrier
1.	Lack of knowledge			
2.	Lack of funds			
3.	Lack of interest			
4.	Lack of manpower			
5.	Lack of space			
6.	Lack of time			
7.	Lack of equipment			
8.	Lack of government legislation and enforcement			

ABSTRACT

Events are the occasions or certain functions that are celebrated with the family and society. Events generate the waste which needs to be treated carefully. The waste generated after the events can be managed using different waste management techniques and process. Waste management includes prevention and minimization, reduction, reuse, recycle, recovery and disposal of the waste. Poor waste management is a result of several barriers considering these facts the present research was undertaken with the objectives of the study were to ascertain types of waste generated after the events, to assess the extent of awareness of event organizers regarding waste management, to find out the waste management practices adopted by event organizers, to find out extent of barriers faced in adopting waste management practices and to develop an audio-visual aid suggesting methods of waste management. Sample size for this research was 120 event organizers (40 Homemakers, 40 Hotel managers and 40 Event managers). A stratified Random sampling technique was used to select samples where samples were stratified into three main groups viz. homemakers, hotel managers and event managers. For selecting homemakers, few residential societies were identified and 40 homemakers were selected randomly who organize events for more than or equal to 50 guests. For selecting hotel and event managers, 40 hotel managers and 40 event managers were randomly selected from the list of existing hotels and event management companies in Vadodara city. The data were collected through interview schedule, five sections were prepared for collecting data. They were background information of the event organizers, types of waste generated after events, awareness regarding waste management, waste management practices adopted by them and barriers faced in adopting waste management practices.

The findings showed that the mean age of homemakers was 42.35 years, were graduates and majority of them were married and unemployed and were having nuclear family. Their mean personal income was ₹ 7750 and family monthly income was ₹36,925. The mean age of hotel managers was 45.78 years, majority of them were graduates with the mean working experience of

21.5 years. The hotels were established since 24.8 years and majority of them were working in small size hotel with 4 stars and majority of hotels were having waste bins as in-house waste disposal facility. The mean age of event managers was 38.88 years, majority of them were graduates. The mean working experience was 14.65 years. They were working in companies established around 13.65 years. Findings showed that majority of the event organizers organized informal events. Findings showed that types of waste generated after all the events were plastic and food waste. The homemakers and event managers had high extent of awareness regarding waste management. The waste management practices were found moderate of all the event organizers. Event organizers faced barriers in adopting waste management practices.

A significant relationship was found between the extent of awareness of the homemakers and event managers regarding waste management and educational qualification, waste management practices adopted by homemakers with marital status, age and educational qualification, extent of barriers faced in adopting waste management practices by homemakers with their family monthly income, extent of barriers faced in adopting waste management practices by event managers with their educational qualification, extent of awareness regarding waste management and waste management practices of homemakers, waste management practices adopted by hotel manager and extent of barriers faced in adopting waste management practices. Hence, it can be concluded that if hotels adopt waste management practices aimed at the reuse and recycling of waste that has already been created, as well as the recovery of energy from such garbage, the volume of waste generated might be significantly decreased. A massive awareness campaign in association with communities, NGO’s, students and other stakeholders needs to be planned to push for better implementation of waste management rules. An audio-visual prepared in this research is an small effort for spreading awareness among all associations regarding waste management opportunities available at local levels. The use of audio-visual resources reinforces effective learning and impactful approach for interaction.