Waste Management in the Temples of Old City, Jammu

MAJOR PROJECT REPORT

SEMESTER- I

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(DESIGN YOUR DEGREE)

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SUBMITTED BY THE TEAM: **WARRIORS**

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The work embodied in this report entitled "**Waste Management in the Temples of Old City, Jammu**" has been done by Team Warriors including group members- Diya Rani, Gourav Sharma , Ishaan Uppal, Malhar Khadyal, Paridhi Mahajan and Vidhita Arora as a Major Project for Semester I of Four-Year Undergraduate Programme(Design Your Degree) . This work was carried out under the guidance of Mentor Dr. Shallu Sehgal and Dr. Anil Gupta for the partial fulfilment for the award of the Design Your Degree, Four Year Undergraduate Programme, University of Jammu, Jammu And Kashmir. This project report has not been submitted anywhere else.

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ABSTRACT

The ancient city of Jammu, nestled in the heart of the Indian subcontinent, is renowned for its rich cultural heritage and iconic temples reflecting centuries of religious fervor and architectural brilliance. However, as the old city remains a hub of spiritual and cultural activities, it grapples with the contemporary challenge of efficient waste management, particularly within the premises of its historic temples. The constant influx of devotees and tourists generates increasing waste daily, posing a threat to the beauty and sanctity of these revered sites. The temples of the old city face a unique challenge due to their blend of cultural practices, historical significance, and a steady stream of visitors. The lack of designated waste disposal areas, coupled with outdated collection methods, results in an unsightly environment within the temple premises, contradicting their spiritual essence and jeopardizing visitor health. Implementing a robust waste management system in Jammu's old city temples is imperative to preserve the cultural and spiritual essence of this historical tapestry. Overflowing bins and litter compromise the sanctity and architectural integrity of these sites. Additionally, unaddressed waste concerns pose tangible threats to public health. Balancing tradition with modern waste management practices is crucial in an era marked by increasing environmental consciousness. Practical waste management solutions include introducing labelled bins for segregation, community awareness programs, volunteer cleanup drives, composting stations, promoting eco-friendly utensils, collaboration with local authorities, and regular maintenance checks. These measures not only contribute to cleanliness but also uphold the commitment to preserving cultural heritage and ensuring the well-being of the community and the environment in the old city of Jammu.

CHAPTER-1

INTRODUCTION

1.1 Introduction of Waste Management

Waste management encompasses the collection, transportation, and proper disposal of various types of waste, including sewage, garbage, and recyclable materials. It involves activities such as collecting, processing, recycling, and disposing of waste to minimize its environmental impact and promote sustainability. Waste management is crucial for safeguarding human health, preserving natural resources, and mitigating pollution. It also involves implementing strategies like recycling programs to promote sustainable practices and reduce the volume of waste sent to landfills or incinerators [1].

1.2 Principles

The 5Rs of waste management serve as guiding principles to mitigate the environmental impact of waste:

- Refuse – This entails declining unnecessary items like single-use plastics or excessive packaging.
- Reduce – This underscores the importance of minimizing waste generation by using fewer resources and practicing mindful consumption.
- Reuse – Rather than discarding items after a single use, explore ways to reuse them, whether through repurposing or opting for durable goods with extended life spans.
- Repurpose – Give items new purposes or functions, prolonging their usefulness and reducing waste.
- Recycle – Recycling involves transforming used materials into new products, thereby decreasing the demand for raw materials and lessening the overall environmental footprint [2].

1.3 Methods of Waste Management

- **Landfill:**

  In this method, non-reusable or non-recyclable waste is segregated and laid out in thin layers in low-lying areas across a city. A layer of soil is added after each garbage layer. However, once this process is complete, the area is deemed unsuitable for constructing buildings for the next 20 years. Instead, it can only be utilized as a playground or a park.

- **Incineration:**

  Incineration involves the controlled combustion of waste to reduce it to incombustible matter such as ash and waste gas. The exhaust gases are treated before being released into the environment due to their potential toxicity. This approach reduces waste volume by 90%, making it one of the most hygienic waste disposal methods. In some cases, the heat generated is utilized to produce electricity. However, some criticize this method for not being entirely environmentally friendly due to the emission of greenhouse gases like carbon dioxide and carbon monoxide.

- **Waste Compaction:**

  Materials like cans and plastic bottles are compacted into blocks and sent for recycling. This process prevents metal oxidation and reduces airspace requirements, facilitating transportation and positioning.

- **Biogas Generation:**

  Biodegradable waste such as food items, animal waste, or organic industrial waste from food packaging industries are directed to bio-degradation plants. Here, they are converted into biogas through degradation with the assistance of bacteria, fungi, or other microbes. Biogas, a fuel, is produced alongside residue used as manure.

- **Composting:**

  Organic materials, including food scraps and yard waste, decompose over time. Composting involves burying these organic wastes under layers of soil, allowing them to decay under the action of microorganisms like bacteria and fungi. This process yields nutrient-rich manure and replenishes soil nutrients while enhancing water retention capacity. It serves as an eco-friendly alternative to chemical fertilizers in agriculture.

- **Vermi composting:**

  Vermi composting utilizes worms for the degradation of organic matter into nutrient-rich manure. Worms consume and digest organic matter, enriching the soil with their excreted by-products. This method is highly effective compared to traditional composting [3-4].

1.4 Waste Management in Temples

Waste management is a critical aspect of environmental sustainability, and it extends to all facets of society, including religious institutions like temples. Temples, as centers of spiritual and communal activity, attract large numbers of visitors and devotees, resulting in the generation of various types of waste. Proper waste management in temples is essential not only for maintaining cleanliness and hygiene but also for preserving the surrounding environment and promoting eco-friendly practices. Temples play a significant role in the cultural and social significance of many communities, often serving as gathering places for worship, festivals, and social events. With such activities comes the generation of waste, including organic waste from offerings such as flowers, fruits, and food, as well as non-biodegradable waste like plastic packaging, paper, and other materials. Improper disposal of this waste can lead to pollution, environmental degradation, and health hazards for both humans and wildlife. There has been a growing awareness of the need for sustainable waste management practices in temples. Many temples are taking proactive steps to implement waste segregation, recycling initiatives, and composting programs to minimize their environmental footprint. Additionally, there is a growing emphasis on raising awareness among devotees about the importance of responsible waste disposal and the benefits of adopting eco-friendly practices.

1.5 Key Challenges in Waste Management

1. **Collection and disposal infrastructure:** Developing adequate infrastructure for waste collection, transportation, and disposal is crucial. This can involve investments in waste collection systems, landfill management, recycling facilities, and composting sites. Public-private partnerships can also help in building and maintaining this infrastructure.

2. **Financial constraints**: To address funding shortages, governments can explore various financing mechanisms such as public-private partnerships, waste management fees, taxes on

waste generation or disposal, and seeking international aid or loans for infrastructure development.

3. **Lack of support from localities**: Increasing awareness and education about the importance of waste management can help overcome resistance. Engaging communities through outreach programs, involving them in decision-making processes, and providing incentives for proper waste management practices can encourage participation and cooperation.

4. **Ineffective recycling or composting**: Governments can invest in expanding recycling and composting infrastructure, improving collection systems, and implementing policies to promote waste reduction and segregation at the source. Public awareness campaigns can also educate citizens about the importance of recycling and composting.

5. **Ever-changing climate:** Adapting waste management strategies to climate change involves measures such as designing more resilient infrastructure, implementing disaster preparedness plans for extreme weather events, and integrating climate considerations into waste management policies and practices [5-6].

1.6 Waste Generation

"Waste" is a human construct and doesn't exist in natural systems. In nature, everything operates in a cycle of use and reuse, where materials are consumed by organisms and returned to the environment in a form that can be utilized again. Solid waste, on the other hand, is a product of human activities and consists of various discarded materials that are considered useless or worthless. However, these materials can often be repurposed or recycled, turning what might be considered waste into valuable resources. Efforts to reduce waste production and increase recycling are crucial for maintaining a sustainable environment. By recognizing the value in materials that would otherwise be discarded and finding effective ways to reuse or recycle them, humans can minimize their environmental impact and move towards a more sustainable future [7].

1.7 Types of Waste

[1] Biodegradable Waste: Biodegradable materials are substances that can rapidly decompose through the action of bacteria and other natural organisms, without causing pollution.

Examples include kitchen waste, food scraps, and other organic matter. These materials are easily broken down by microorganisms like bacteria and fungi, as well as by abiotic factors such as temperature, UV radiation, and oxygen. Microorganisms, in conjunction with these abiotic factors, break down complex materials into simpler organic matter, which eventually returns to the earth without harming the environment. This natural process can occur at varying rates, but overall, biodegradable waste poses minimal hazards and environmental concerns.

[2] Non-Biodegradable Waste: Non-biodegradable materials are substances that contribute to pollution and cannot be broken down by living organisms. Unlike biodegradable waste, non-biodegradable materials cannot be easily managed. They resist degradation by natural processes and persist in the environment for extended periods. This longevity increases the severity of the threat they pose. Plastics serve as a prominent example, as they are widely used across various industries. Advances in plastic technology have led to the production of high-quality polymers that are more durable and temperature-resistant, prolonging their lifespan even after use [8].

CHAPTER-2
PROBLEM STATEMENT AND PROJECT OBJECTIVES

2.1Problem statement

The old city of Jammu faces significant challenges regarding waste management, particularly within temple premises. Despite their cultural significance, many temples lack proper waste disposal systems, leading to environmental pollution, health hazards, and degradation of sacred sites. The accumulation of non-biodegradable waste, such as plastic items and offerings, poses a threat to local ecosystems and water bodies. Many temples lack designated waste collection points, bins, or recycling facilities, resulting in haphazard disposal practices. Visitors and local communities may not be adequately educated about the importance of proper waste disposal and its impact on the environment and public health. Traditional rituals and offerings often involve materials that are non-biodegradable, exacerbating the waste management challenge. By addressing these issues and implementing proactive measures, we can preserve the cultural heritage of temples while promoting sustainable waste management practices in the old city of Jammu.

2.2 Significance and importance of waste management

Waste management in the temples of the old city of Jammu is significant for several reasons:

- **Cultural and Religious Importance:**
  Temples hold immense cultural and religious significance in the community. Proper waste management reflects respect for these sacred spaces and demonstrates adherence to religious principles of cleanliness and purity.
- **Environmental Protection:**
  Effective waste management in temples helps prevent pollution of local water bodies, soil, and air. It contributes to preserving the natural beauty of the surroundings, which is often intertwined with the spiritual ambiance of the area.
- **Public Health and Hygiene:**
  Poor waste management can lead to the proliferation of pests, spread of diseases, and unpleasant odors, impacting the health and well-being of temple visitors, nearby residents,

and workers. Proper waste disposal minimizes health risks and maintains hygiene standards.

- **Community Engagement:**

  Waste management initiatives in temples encourage community involvement and cooperation. Volunteers can participate in clean-up drives, awareness campaigns, and recycling efforts, fostering a sense of unity and collective responsibility among residents.

- **Tourism and Heritage Preservation:**

  The old city of Jammu is a popular tourist destination known for its historical temples. Clean and well-maintained temple premises enhance the visitor experience, attracting more tourists and preserving the cultural heritage of the region.

2.3 Outcomes

During the survey in the temples of old city of Jammu, some outcomes might be expected such as:

- Temple information
- Identification of current waste management practices
- Assessment of waste generation
- Evaluation of infrastructure
- Awareness and education levels
- Stakeholder engagement

2.4 Objectives

- To study and understand the waste generation of the temple on daily and weekly basis.
- To analyze the current waste management strategies and reasons for improper waste management of temples in old city of Jammu.
- Perception of the respondents regarding waste disposal and management on the temple's environment.

CHAPTER-3
METHODOLOGY

3.1 Methodology of the study

'Waste Management in the temples of Old City, Jammu' typically revolved around various elements in making the project successful

1. In the initial stage, project objectives and key problem statements were formulated. After thorough deliberation, we narrowed down the area of survey to the temples located in the old city of Jammu.
2. The second step involved determining the sample size for present study, specifically the number of temples to be included and examined. After consulting with our mentors, we decided that the research sample for this project would consist of **30 temples.**
3. The third step involved creating **structured interview schedule** with guidance from our mentors.
4. The interview schedule is divided into 5 sections (A, B, C , D , E) that was

- **Section A** deals with Collection of personal details of the respondent
  Our respondent for the questionnaire is temple Priest **(Pandit ji) or the care taker of the temple if any**
- **Section B** deals with the collection of information regarding the temple ranging from varieties of deities worshipped, location and name of the temple, timings or visiting hours in the temple both morning and evening, number of visitors coming to the temple on each day and offerings offered in the temples.
- **Section C** deals with the collection of information regarding the waste occurring in the temple on weekly and daily bases. The idea is to understand how waste is handled and how much of waste is generated, during festivals and how this waste is handled.
- **Section D & E** deals with the awareness questions asked from the respondent regarding cleanliness in the temples, its importance & etc.

5. After designing the interview schedule and approved by the mentors, group members conducted a pilot study for final approval of interview schedule .

3.2 Data Analysis and Interpretation

After the data collection through primary survey, tabulation of the data was done. For data analysis simple statistical tool have been used for the purpose. The mentees used averages and percentage method to carry out the analysis.

CHAPTER-4

RESULTS AND DISCUSSION

The following chapter 2 deals with the result and analysis. The chapter is begin divided into 5 section i.e.

Section A- Personal information of the respondents (temple priest or temple care)

Section B- Impact of Waste on Temples

Section C- Waste Management by Temples

Section D- Current Waste Management Practices and Reasons for Improper Waste Management

Section E- Impact of Waste on Temples

Section A: Introduction to Respondents

This section solely deals with an overview of the individuals responsible for managing temple affairs, offering insights into their roles and perspectives on waste management within these religious sites.

Section B: Impact of Waste on Temples

This part exclusively focuses on the historical and cultural significance of temples in the old city of Jammu, presenting details such as construction history, visitor demographics, and operating hours, providing a comprehensive understanding of these revered places.

Section C: Waste Management by Temples

This section solely focuses on exploring the operational aspects of waste management within temple premises, outlining the methods and systems employed by temples to handle waste generated within their vicinity.

Section D: Current Waste Management Practices and Reasons for Improper Waste Management

This part solely deals with assessing the existing waste management strategies adopted by temples, identifying challenges and reasons contributing to inadequacies in waste management practices, offering insights into areas requiring improvement.

Section E: Impact of Waste on Temples

This section solely focuses on examining the consequences of improper waste management on temple environments, evaluating the detrimental effects such as ecological degradation and potential health hazards, highlighting the importance of implementing sustainable waste management solutions.

4.1 SECTION: A - This section focuses on the personal information of respondents

The present section focuses on personal information about respondents typically includes demographic details such as age, gender, marital status, education level, year of experience in the temple, family members of the respondents and their occupation. The priests of the temples are the respondents.

4.1.1 **Gender of Respondents**

Observation: The data shows a significant gender disparity, with males comprising the overwhelming majority of respondents at 93.3%, while females represent only 6.7% of the total sample. This indicates a considerable imbalance in gender representation within the surveyed population. Such disparities in gender distribution can have implications for various analyses, policies, and initiatives, emphasizing the importance of addressing gender diversity and inclusion in the context of the surveyed demographic.

Table: 4.1.1 Gender of the Respondents

Gender	No. of Respondents	%Age
Male	28	93.3
Female	2	6.7

Source: Field Survey

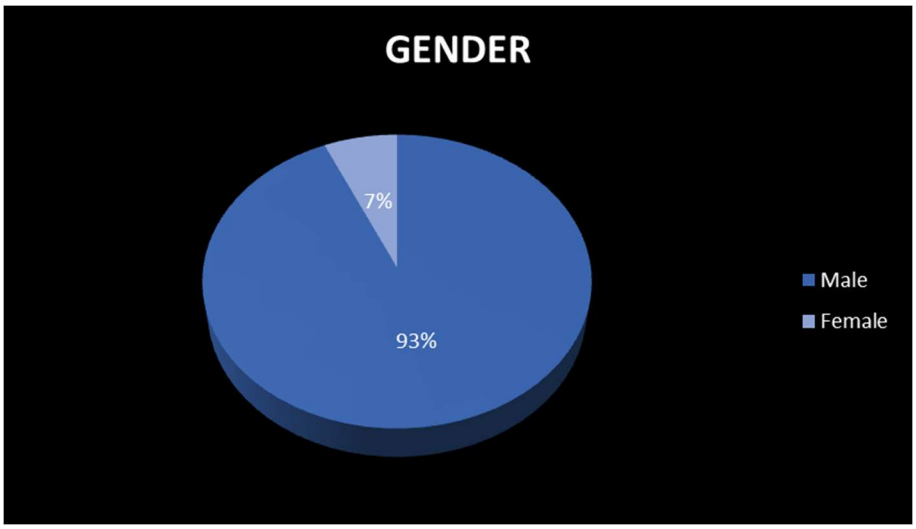


Fig 4.1.1 Gender of the Respondent **Source:** Field Survey

4.1.2 Age of Respondents

Observations: The age group distribution illustrates a varied demographic landscape, with individuals distributed across different age brackets. The age group of 40-45 years old has the highest representation, with 7 respondents, accounting for 23% of the total sample, followed by the 45-50 years old bracket with 5 respondents, representing 17%. These two brackets collectively represent a significant portion of the surveyed population, suggesting a concentration of individuals in their late 30s to early 50s. Additionally, the 30-35 years old and 35-40 years old brackets each contribute 3 respondents, showcasing a consistent distribution among these age ranges. There's a gradual decline in the number of individuals as age increases beyond 50, with each successive age bracket representing fewer respondents. The older age groups, from 55-60 years old to 80-85 years old, each have only 1-2 respondents, indicating a diminishing presence of individuals in these age brackets. Overall, this distribution provides

insights into the age composition of the surveyed population, which can inform various analyses, policies, and initiatives targeting specific age demographics.

Table: 4.1.2 Age Group of Respondents

Age group	No. of Respondents	%Age
30-35	3	10
35-40	3	10
40-45	7	23
45-50	5	17
50-55	4	14
55-60	1	3
60-65	2	7
65-70	2	7
70-75	1	3
75-80	1	3
80-85	1	3

Source: Field Survey

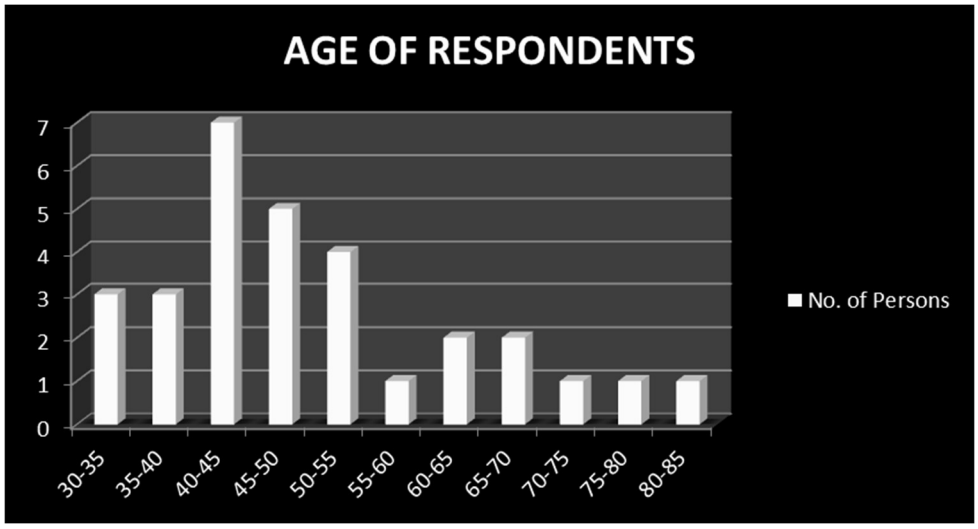


Fig 4.1.2 Age Group of Respondents **Source:** Field Survey

4.1.3 Marital Status

Observations: The data illustrates a predominant representation of married individuals, accounting for 73.3% of the total respondents. Conversely, unmarried individuals make up 23.3% of the sample, indicating a noteworthy proportion who have not entered into marriage. There is also a small representation of widowed individuals, comprising 3.4% of the sample. This distribution highlights the diversity in marital status among the surveyed population, offering insights into the social dynamics within the demographic.

Table: 4.1.3 Married Status of Respondents

Married Status	No. of Respondents	%Age
Married	22	73.3
Unmarried	7	23.3
Widow	1	3.4

Source: Field Survey

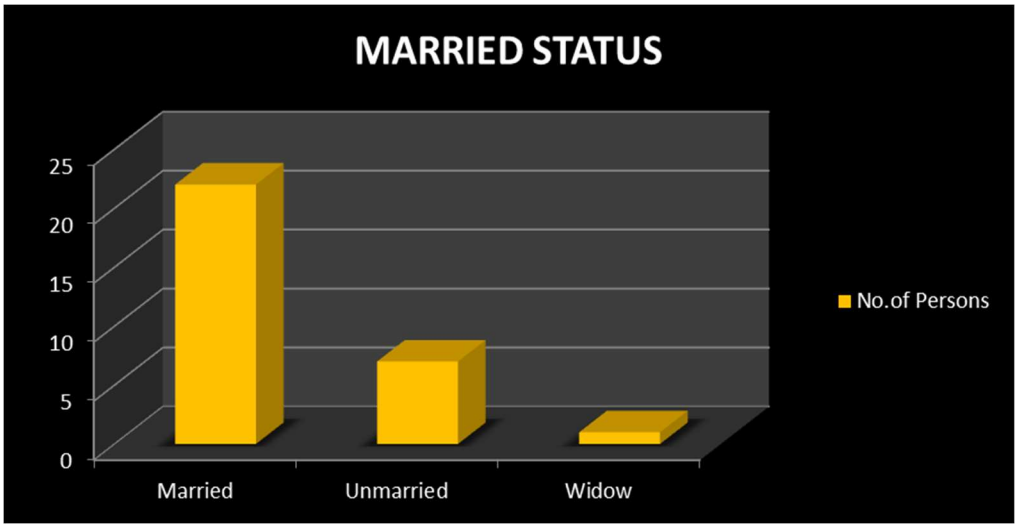


Fig 4.1.3 Married Status of Respondents **Source:** Field Survey

4.1.4 Educational Qualification

Observation: The educational status distribution highlights a diverse range of educational backgrounds among the surveyed respondents. The highest percentage of respondents, at 26.7%, have attained a Higher Secondary education, indicating a significant proportion with education up to this level. Following closely behind, 23.3% of respondents have completed Graduation, suggesting a substantial number with undergraduate qualifications. Additionally,

both Primary and Secondary education levels are well-represented, each contributing 20% and 16.7% to the sample, respectively. Post Graduation and Other educational qualifications, though less prevalent, still make up 10% and 3% of the sample, respectively. This distribution showcases the varied educational landscape within the surveyed population, which can inform discussions and initiatives related to educational attainment, skill development, and workforce planning.

Table: 4.1.4 Educational Qualification of Respondents

Educational Status	No. of Respondents	%Age
Primary	6	20
Secondary	5	16.7
Higher Secondary	8	26.7
Graduation	7	23.3
Post Graduation	3	10
Others	1	3

Source: Field Survey

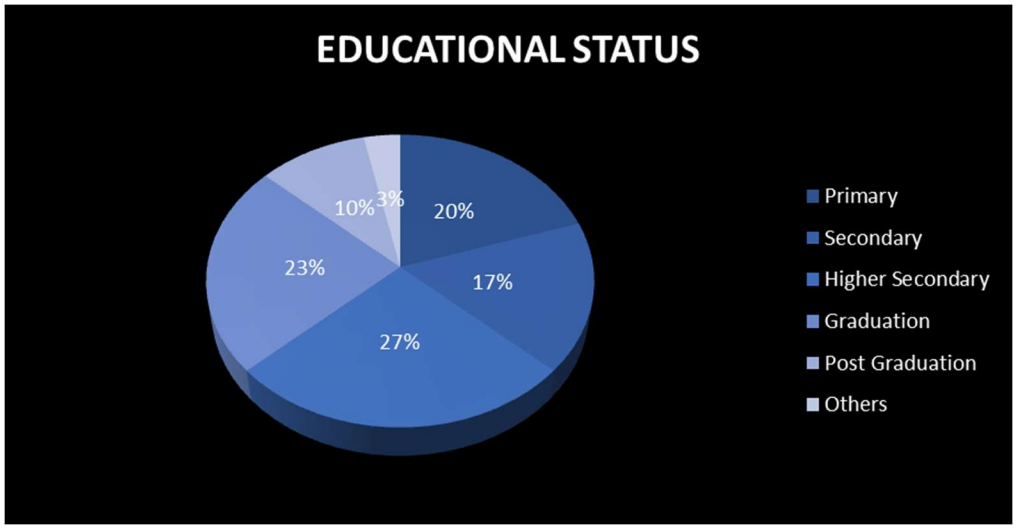


Fig 4.1.4 Educational Qualification of Respondents **Source:** Field Survey

4.1.5 Family Members

Observation: The distribution of family members among the respondents surveyed indicates a predominant representation of households with 0-5 family members, accounting for 60% of the total respondents. This suggests that a significant portion of the population surveyed resides in relatively small households. Furthermore, households with 5-10 family members constitute 33.3% of the sample, indicating a substantial proportion of larger households. Conversely, households with 10-15 family members make up only 6.7% of the sample, representing a minority but still noteworthy presence. This distribution offers insights into the household size diversity within the surveyed population, which can inform discussions and initiatives related to housing, family dynamics, and social welfare

Table: 4.1.5 No. of Members in the Family of Respondents

Family Members	No. of Respondents	%Age
0-5	18	60
5-10	10	33.3
10-15	2	6.7

Source: Field Survey

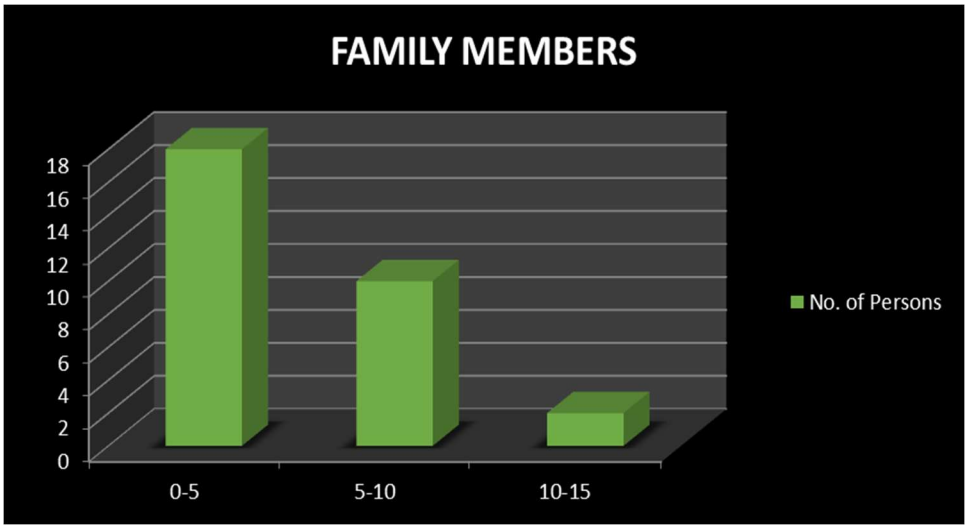


Fig: 4.1.5 No. of members in the Family of Respondents **Source:** Field Survey

4.1.6 Year of Experience

Observation: The distribution of years of experience (YOE) among the surveyed respondents reveals a diverse range of experience levels within the sample. The most common YOE range is 10-20 years, with 8 respondents, constituting 27% of the total sample. This indicates a significant portion of the surveyed population possesses a moderate level of expertise and tenure in their respective fields. Similarly, YOE ranges of 0-10 years and 20-30 years each have 6 respondents, representing 20% of the sample, indicating a balanced distribution across these ranges. Additionally, YOE ranges of 30-40 years, 50-60 years, and 60-70 years each have 3 respondents, contributing 10% to the sample, while the YOE range of 40-50 years has 2 respondents, accounting for 6% of the sample. Overall, this distribution provides insights into the diverse experience levels among the surveyed respondents, which can inform discussions and initiatives related to workforce planning, talent development, and career progression.

Table: 4.1.6 Year of Experience of Respondents

YOE	No. of Persons	%Age
0-10	6	20
10-20	8	27
20-30	6	20
30-40	3	10
40-50	2	6
50-60	3	10
60-70	2	7

Source: Field Survey

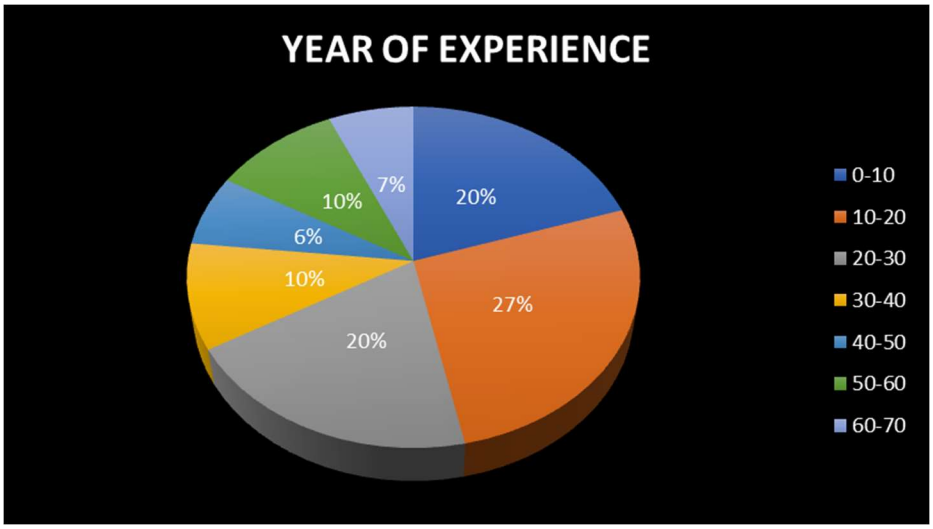


Fig 4.1.6 Year of Experience of Respondents **Source:** Field Survey

4.1.7 Water Supply Source

Observation: The data indicates that the majority of temples, accounting for 86.7% of the total, have their water supply located inside the temple premises. This suggests that a significant proportion of temples are equipped with internal water sources, facilitating various religious and ceremonial activities within the temple compound. Conversely, a smaller but still noteworthy proportion of temples, representing 13.3% of the total, rely on external water sources located outside the temple premises. This distribution highlights the prevalent practice of having internal water supply systems within temples, underscoring their importance in ensuring convenient access to water for various purposes.

Table: 4.1.7 Water Supply Source in Temple

Water Supply	No. of Temples	%Age
Inside	26	86.7
Outside	4	13.3

Source: Field Survey

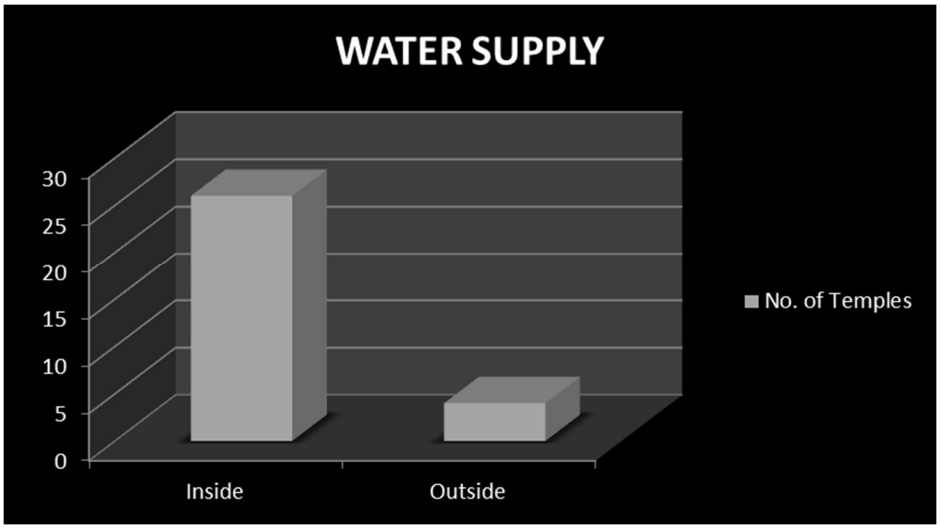


Fig: 4.1.7 Water Supply Source in Temple **Source:** Field Survey

4.1.8 Occupation

Observation: The data illustrates a predominant representation of individuals engaged in primary occupations, accounting for 80% of the total respondents. This suggests that a significant majority of the surveyed population is primarily employed in roles such as agriculture, fishing, or forestry, typically associated with primary economic activities. Conversely, individuals engaged in secondary occupations represent a smaller but still noteworthy proportion, accounting for 20% of the sample. Secondary occupations typically encompass industries like manufacturing, construction, or services, indicating a diverse but comparatively lesser representation within the dataset. This distribution provides insights into the occupational composition within the surveyed population, which can inform discussions and initiatives related to workforce dynamics, economic development, and employment policies.

Table: 4.1.8 Occupation of Respondents

Occupation	No. of Respondents	%Age
Primary	24	80
Secondary	6	20

Source: Field Survey

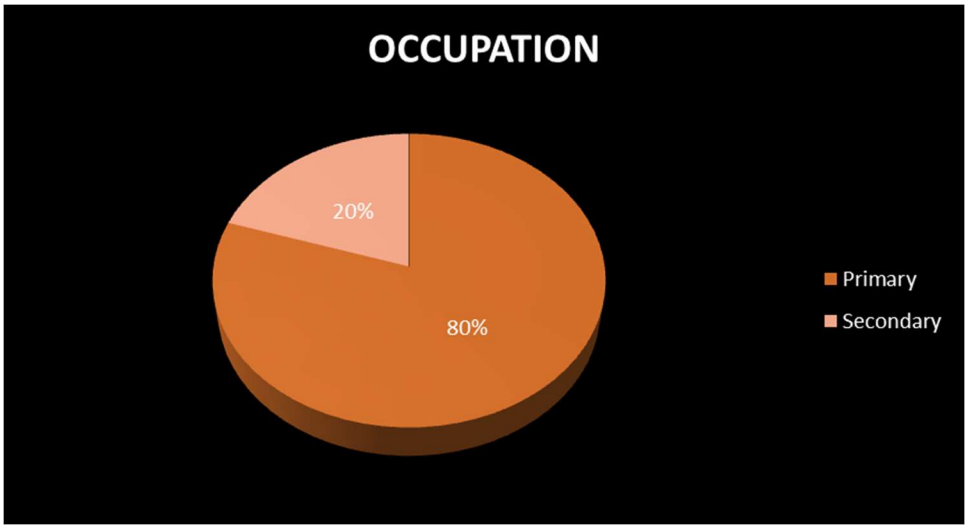


Fig: 4.1.8 Occupation of Respondents **Source:** Field Survey

4.1.9 Conclusion: The analysis of the data reveals several key insights into the demographic composition and socio-economic dynamics of the surveyed population. Firstly, there exists a significant gender disparity, with males comprising the overwhelming majority of respondents. This underscores the importance of addressing gender diversity and inclusion within the surveyed demographic. Secondly, the age distribution indicates a concentration of individuals in their late 30s to early 50s, with a gradual decline in representation among older age groups. This insight into age composition can inform various policies and initiatives targeting specific age demographics. Thirdly, the diverse range of educational backgrounds among respondents highlights the need for discussions and initiatives related to educational attainment and skill development. Additionally, the distribution of family members among respondents offers insights into household size diversity, which can inform discussions related to housing and social welfare. Moreover, the diverse range of experience levels among respondents underscores the importance of workforce planning and talent development initiatives. Furthermore, the prevalent practice of having internal water supply systems within temples emphasizes their significance in facilitating religious activities. Lastly, the predominance of individuals engaged in primary occupations highlights the importance of understanding workforce dynamics and economic development strategies.

4.2. SECTION: B This section focuses on the information about the temple

In the section dedicated to temple information, a comprehensive overview of various aspects is typically provided. This includes details about the deity worshipped, offering insights into the religious significance and practices associated with the temple. Additionally, the year of construction or establishment, type of visitors, type of offerings, location as well as timings of the temple.

4.2.1 Location of the temple

Observation: The data provides information about the distribution of temples across different locations. Panjtirthi has the highest number of temples, representing 27% of the total temples surveyed. Following Panjtirthi, Mubarak Mandi and Purani Mandi have 3 temples each, accounting for 10% and 13% respectively of the total temples. Most other locations have one or two temples, each contributing 3-7% to the total. This distribution of temples across various locations provides insights into the religious and cultural landscape of the surveyed area, highlighting the significance of certain areas as religious centers.

Table 4.2.1 Location of the temples

Location	No. of temple	%Age
circular road	1	3
fattu chougan	1	3
geeta bhawan jammu	1	3
kachi chawani	1	3
kc plaza	1	3
lakhdata bazar	1	3
Mastgarh	1	3
moti baar	2	7
mubarak mandi	3	10
pacca danga	1	3
Panjtirthi	8	27
purani mandi	4	13

Raghunath bazar	1	3
rani park	2	7
sarajiyon di dakki	1	3
Shalamar road	1	3

Source: Field survey

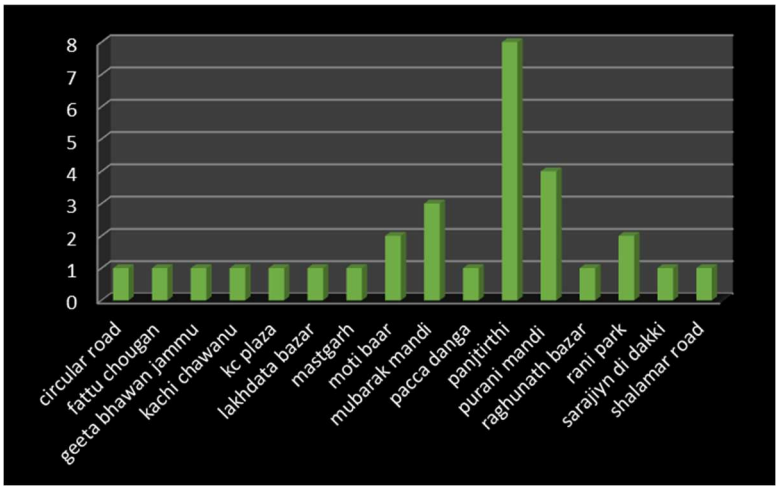


Figure 4.2.1 Location of the temples **Source:** Field Survey

4.2.2 Deity Worshipped

Observation: The data on deity worship across the surveyed temples reveals a diverse and vibrant religious landscape within the region. Among the various deities worshiped, Lord Shiv Ji emerges as the most prominent, with five temples dedicated to his worship, representing 17% of the total surveyed. Following closely behind are temples devoted to Lord Hanuman Ji and Lord Ram Ji, with four and three temples respectively. This indicates a significant reverence for these deities among the local populace. Additionally, the presence of temples worshiping multiple deities, such as Lord Krishna Ji and Lord Shiv Ji, or Lakshmi Ji and Narayan Ji, reflects the syncretic nature of religious practices in the area, where different aspects of divinity are honored together. Moreover, the inclusion of temples dedicated to deities like Bole Nath Ji, Chandi Mata Ji, and Sukarala Mata Ji underscores the rich tapestry of regional religious beliefs and traditions. Overall, the distribution of temples based on deity worship offers valuable insights into the spiritual fabric and cultural heritage of the surveyed

population, highlighting the diversity and inclusivity of religious practices observed within the region.

Table: 4.2.2 Deity worshipped in temples

Deity Worshipped	No. of Temples	%age
1008 shri baba lal ji	1	3%
bole nath ji	1	3%
chandi mata ji	1	3%
dev bhoomi	1	3%
hanuman ji	4	13%
jalfa mata ji	1	3%
krishna ji	2	7%
krishna ji and shiv ji	1	3%
lakshmi ji	2	7%
lakshmi ji and narayan ji	1	3%
lord vishnu ji	1	3%
mata urmila ji,ram ji, thakur ji	1	3%
radha krishan ji	2	7%
ram ji	3	10%
sheva wali mata ji	1	3%
shiv ji	5	17%
sukarala mata ji	1	3%
vishnu ji and lakshmi mata ji	1	3%

Source: Field Survey

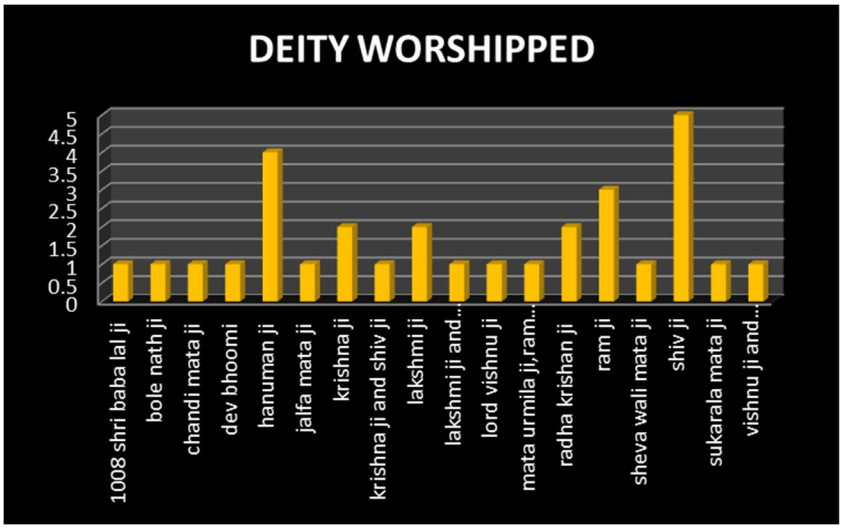


Figure 4.2.2 Deity worshipped in temples **Source:** Field Survey

4.2.3 Type of offering

Observation: The data on offerings made in temples provides valuable insights into the religious practices and cultural traditions observed within the surveyed area. A diverse array of offerings is evident, ranging from traditional items like flowers, sweets, fruits, and garlands to more specific items such as halwa, ghee, and coconut. Among these offerings, flowers and monetary donations emerge as the most prevalent, each constituting nearly 20% of the total offerings received. This reflects the significance of floral decorations in religious rituals and the practical support provided by monetary contributions for temple maintenance and charitable activities. Additionally, the variety of offerings reflects the cultural and regional diversity, with certain items likely reflecting local customs and preferences. Notably, items like Rudraksh, rice, and coconut hold religious significance and are offered accordingly in accordance with Hindu rituals. Overall, the data underscores the importance of offerings in temple worship and highlights the rich tapestry of religious beliefs and practices observed within the community.

Table 4.2.3 Type of offering in the temple on daily basis

Type of offering	No. of temples	%Age out of 100
Flowers	30	19.61
Sweet	11	7.19
fruits	20	13.07
Halwa	4	2.61
Ghee	4	2.61
Clothes	6	3.92
Chunri	2	1.31
makeup items	3	1.96
Biscuits	2	1.31
Garland	7	4.58
Agarbatti	1	0.65
Dhoop	1	0.65
Belpatri	1	0.65
Money	30	19.61
Rudraksh	1	0.65
dry fruit	2	1.31
Channe	1	0.65
coconut	4	2.61
Rice	3	1.96
Liquid	3	1.96
Plastic	1	0.65
Grain	1	0.65
Flour	2	1.31

Source: Field survey

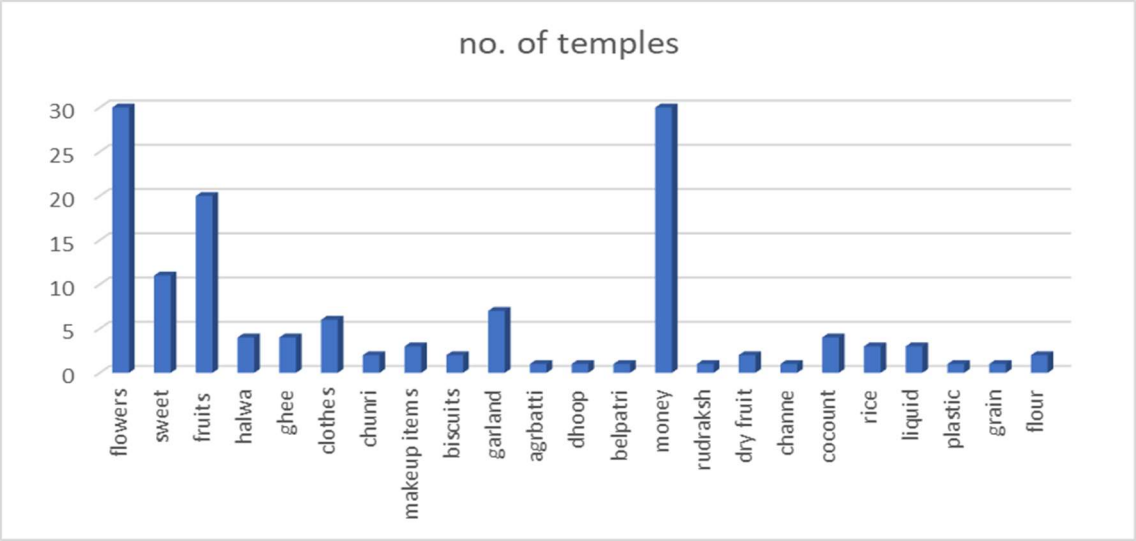


Figure 4.2.3 Type of offering in the temple **Source:** Field Survey

4.2.4 Year of Establishment

Observation: The distribution of temples based on the year of construction provides valuable insights into the historical development and 6% of the total temples surveyed. This suggests a period of significant religious and cultural activity within the region during that time frame. Additionally, temples constructed within the ranges of 0-50 years, 100-150 years, and 150-200 years each contribute to 11.5% of the total temples, indicating a relatively balanced distribution across different historical periods. Furthermore, temples were constructed within the ranges of architectural heritage within the surveyed area. Temples constructed within the range of 50-100 years ago represent the highest percentage, comprising 34 f 200-250 years and 250-300 years also hold significance, representing 19.2% and 11.5% respectively. This distribution reflects the longevity of religious structures and the ongoing significance of historical temples as centers of worship and cultural heritage. Overall, the data highlights the diverse temporal landscape of temple construction, showcasing the rich history and architectural evolution of religious sites within the survey area.

Table 4.2.4 Established Year of the temples

Yob	No. of Temples	%Age
0-50	3	11.5
50-100	9	34.6
100-150	3	11.5
150-200	3	11.5
200-250	5	19.2
250-300	3	11.5

Source: Field survey

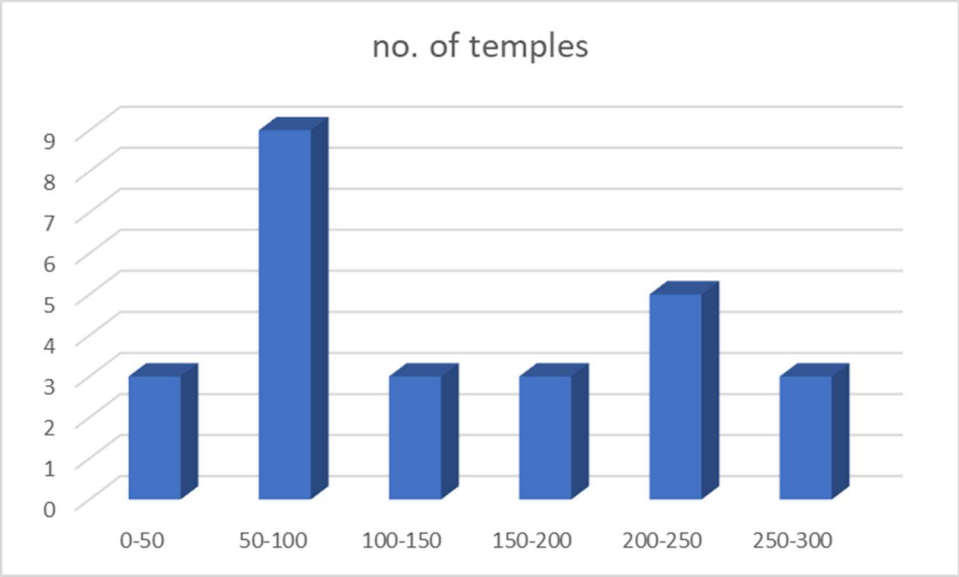


Figure 4.2.4 Established Year of the temples **Source:** Field Survey

4.2.5 Timings of Temples

Observation: The data on temple timings offers insights into the temporal patterns of religious activity and worship within the surveyed area. The majority of temples, constituting 25 out of 54 surveyed temples, are open in the morning, suggesting that this time of day is preferred by worshipers for their religious observances. Similarly, a significant number of temples, 24 in total, are accessible in the evening, indicating a continued interest in evening worship rituals. Interestingly, a smaller but notable portion of temples, comprising 5 out of 54, remain open throughout the day, accommodating devotees who may seek to visit at any time. This

distribution underscores the flexibility of temple schedules to accommodate the diverse schedules and preferences of worshipers, reflecting the importance of accessibility and inclusivity in religious practices. Overall, the data highlights the dynamic nature of religious observances and the adaptability of temple administrations in catering to the spiritual needs of the community throughout the day.

Table 4.2.5 Timings of the temple

Timing	no. of temples
morning	25
evening	24
whole day	5

Source: Field Survey

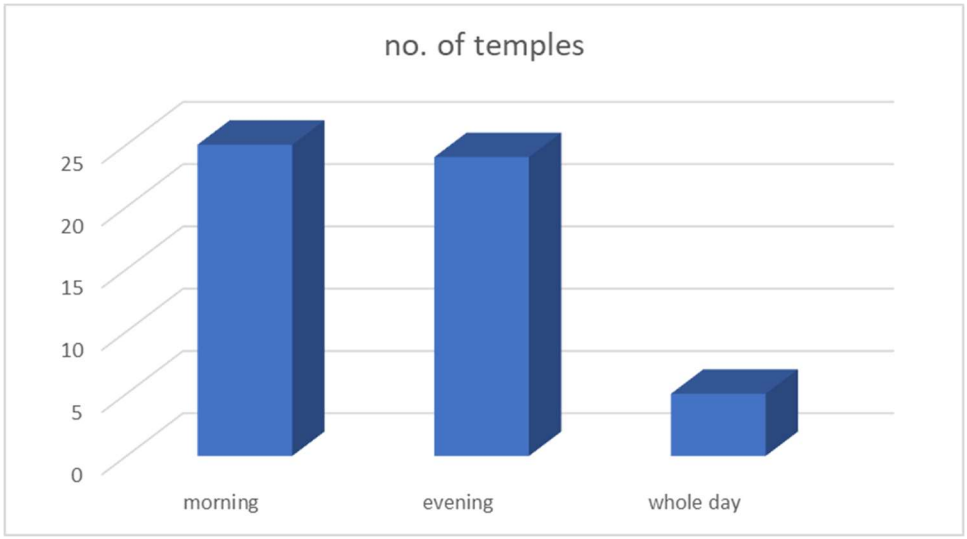


Figure 4.2.5 Timings of the temple **Source:** Field Survey

4.2.6 Number Of Visitors

Observation: The data on the types of visitors to temples sheds light on the diverse demographics of temple attendees within the surveyed area. The majority of visitors, comprising 76.3% of the total, are categorized as locals, indicating a strong presence of residents who regularly engage in religious practices and temple visits within their community.

This suggests a deep-rooted connection between the local population and the religious institutions, with temples serving as important cultural and spiritual centers for the community. Additionally, tourists represent a notable portion of temple visitors, accounting for 21.1% of the total. This underscores the significance of temples as attractions for tourists seeking to explore the region's religious and cultural heritage. Furthermore, while migrants constitute a smaller percentage of temple visitors, comprising only 2.6% of the total, their presence reflects the diverse and transient nature of the population, with individuals from various backgrounds and regions coming together to participate in religious activities. Overall, the data highlights the inclusive nature of temple visitation, welcoming locals, tourists, and migrants alike, and underscores the multifaceted role of temples as sites of spiritual devotion, cultural exchange, and community engagement within the surveyed area.

Table 4.2.6 Number of daily visitors in the temple

Days	no. of visitors	%Age
Monday	8084	11.9
Tuesday	14121	20.7
Wednesday	8803	12.9
Thursday	8567	12.6
Friday	8796	12.9
Saturday	10934	16.1
Sunday	8802	12.9

Source: Field survey

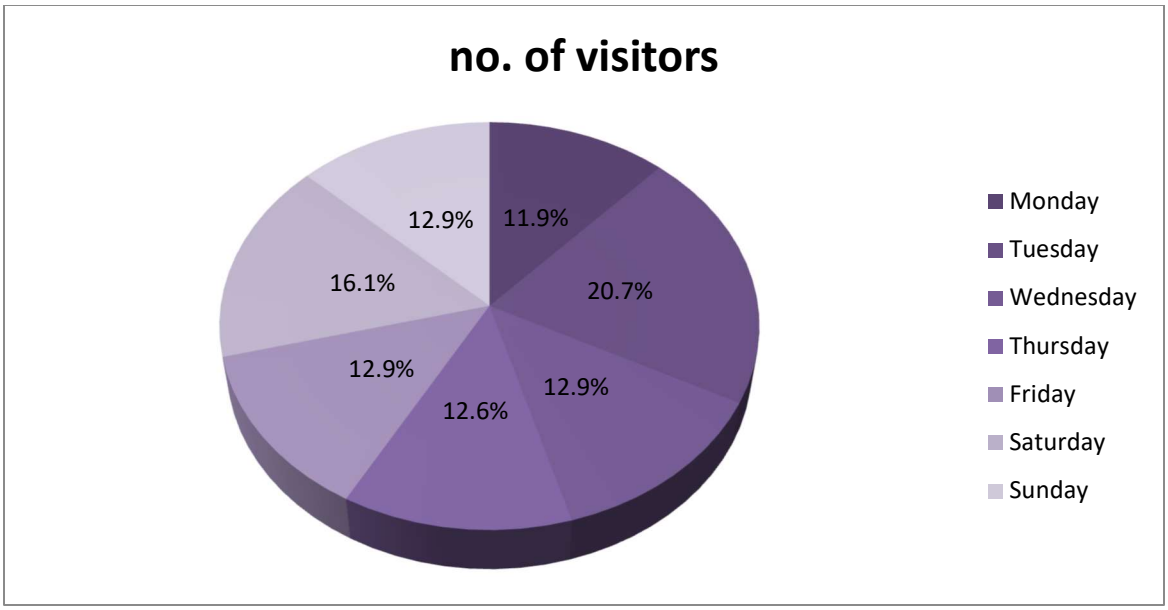


Figure 4.2.6 Number of daily visitors in the temple **Source:** Field Survey

4.6.7 Type of visitors

Observation: The data on the types of visitors to temples sheds light on the diverse demographics of temple attendees within the surveyed area. The majority of visitors, comprising 76.3% of the total, are categorized as locals, indicating a strong presence of residents who regularly engage in religious practices and temple visits within their community. This suggests a deep-rooted connection between the local population and the religious institutions, with temples serving as important cultural and spiritual centers for the community. Additionally, tourists represent a notable portion of temple visitors, accounting for 21.1% of the total. This underscores the significance of temples as attractions for tourists seeking to explore the region's religious and cultural heritage. Furthermore, while migrants constitute a smaller percentage of temple visitors, comprising only 2.6% of the total, their presence reflects the diverse and transient nature of the population, with individuals from various backgrounds and regions coming together to participate in religious activities. Overall, the data highlights the inclusive nature of temple visitation, welcoming locals, tourists, and migrants alike, and underscores the multifaceted role of temples as sites of spiritual devotion, cultural exchange, and community engagement within the surveyed area.

Table 4.2.7 Type of visitors in the temple

type of visitors	no. of temples	% Age
Local	29	76.3
Migrant	1	2.6
Tourists	8	21.1

Source: Field Survey

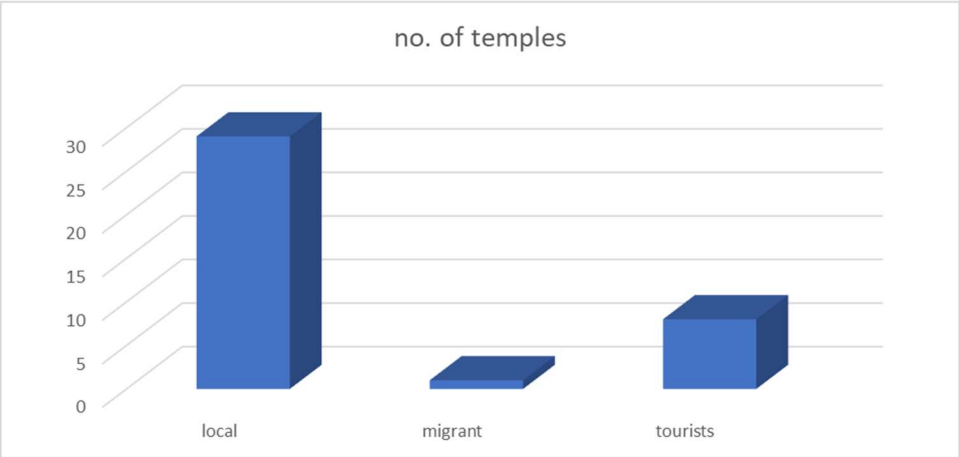


Figure 4.2.7 Type of visitors in the temple **Source:** Field Survey

4.2.8 Conclusion:

To sum up, the information gathered on the temples provides a thorough look into a number of topics, including their locations, the deities they honor, the gifts they make, the dates and years they were established, and the types of visitors they attract. With the most temples, Panjtirthi stands out as a prominent religious center. Most of the temples are devoted to Lord Shiva, Lord Hanuman, and Lord Ram. The variety of offerings is a reflection of the area's varied religious and cultural traditions. The temples' founding years present a varied historical environment, and their hours are designed to accommodate worshippers' convenience, with mornings and evenings being the busiest times. The visitor demographics underscore the inclusive character of temple visits by showcasing a blend of locals, visitors, and migrants. All things considered, this data highlights the temples' importance as social, cultural, and spiritual hubs within the examined area, adding to the religious and cultural diversity of the area.

4.3 SECTION : C The section focuses on the waste generation by the temples

The following section deals with Firstly, it delves into the types of waste items generated daily by each temple, shedding light on the specific materials discarded on a regular basis. Subsequently, it quantifies the daily and weekly waste generation per temple, providing insight into the volume of waste produced over time. Current waste management practices are scrutinized, including the utilization of dustbins for waste disposal, aiming to understand the existing methods employed by temples in handling their waste. Special events hosted by temples are also analyzed, considering their frequency and the percentage of festivals or events celebrated within temple premises. This investigation extends to identifying the types and quantification of waste generated during these special occasions, as well as the procedures for final disposal of waste. Moreover, an evaluation of waste management initiatives in temples is conducted, highlighting the importance of public awareness regarding temple cleanliness. The involvement of Local Authorities in waste collection from temples is examined, along with the duration taken by municipalities for waste collection and the temples' duration for waste disposal. Overall, this comprehensive analysis provides valuable insights into the waste management dynamics within temple environments.

4.3.1 Type and amount of the waste generated daily by each temple per day

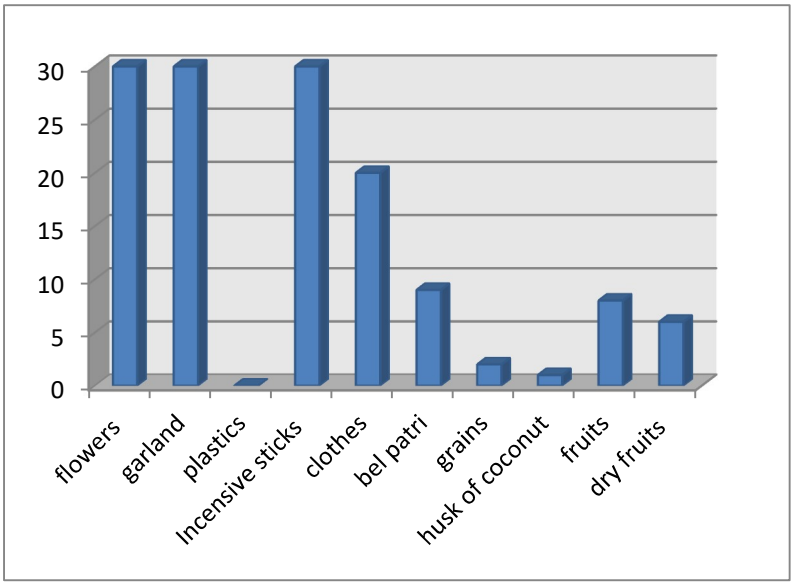
MONDAY

The table 4.3.1offers a detailed insight at the items found in temple waste DURING Monday, showing both the number of each item and its percentage in the total waste. Items such as flowers, garlands, and incense sticks are found in bulk of temple waste, each contributing 30 units and representing 100% of the waste. Clothes constitute 20 units making up 66.67% of the waste. Other items, like bel patri, fruits, and dry fruits, vary in quantity but contribute to a smaller extent, ranging from 20% to 30% of the waste. Interestingly, grains and coconut husks are barely present, making up only around 6.67% and 3.33% of the waste, respectively. It can also be analyzed that plastic waste is not at all present in the waste during Monday's .This breakdown underscores the predominance of natural materials in temple waste, highlighting the minimal presence of certain items like plastics and grains.

Table 4.3.1.1 Type and amount of the waste

Items	Amount of the waste	
	in number	percentage
Flowers	30	100
Garland	30	100
Plastics	0	0
Incensive sticks	30	100
Clothes	20	66.66666667
Bel patri	9	30
Grains	2	6.666666667
Husk of coconut	1	3.333333333
Fruits	8	26.66666667
Dry fruits	6	20

Source : Field survey



Source : Field survey

Fig 4.3.1.1 Type and amount of the waste

TUESDAY

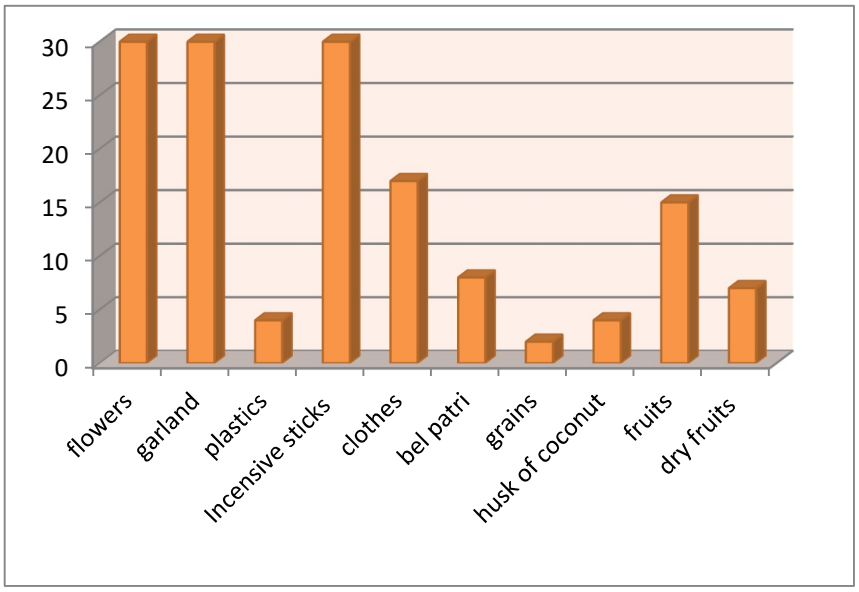
The data provided in table 4.3.2 offers a detailed breakdown of items found in temple waste during Tuesday, including both the number of each item and its percentage in the total waste. It is evident that certain items, such as flowers, garlands, and incense sticks, are consistently prevalent, each contributing 30 units and representing 100% of the waste. Clothes follow closely behind, comprising 17 units and making up 56.66667% of the waste. Other items, like fruits and grains, contribute significant portions to the waste, with fruits comprising 15 units (50%) and grains comprising 2 units (26.6667%). Additionally, bel patri and dry fruits also contribute to the waste, each accounting for 8 units (26.666667%) and 7 units (23.33333%) respectively. Notably, plastics, husk of coconut, and garlands are present in smaller quantities, with plastics and husk of coconut each comprising 4 units (13.333%) and garlands comprising 30 units (100%). This analysis underscores the varied composition of temple waste, with a mix of organic materials like flowers and fruits, alongside synthetic materials like plastics, all of which warrant attention in waste management strategies.

Table 4.3.1.2 Type and amount of the waste

Items	**Amount of waste**	
	in number	percentage
Flowers	30	100
Garland	30	100
Plastics	4	13.333
Incensive sticks	30	100
Clothes	17	56.66667
Bel patri	8	26.666667
Grains	2	26.6667
Husk of coconut	4	13.33333

Fruits	15	50
Dry fruits	7	23.33333

Source : Field survey



Source : Field survey

Fig.4.3.2 Type and amount of the waste

WEDNESDAY

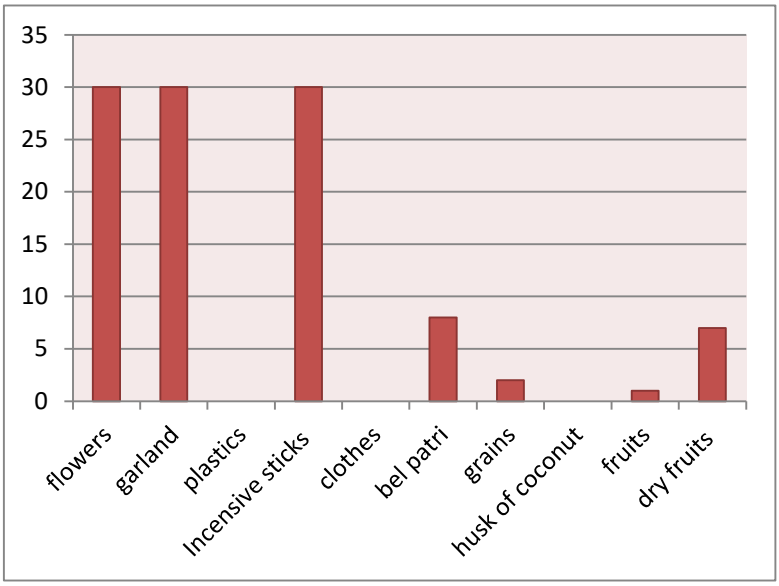
The table 4.3.3, provides a detailed quantitative breakdown of the items comprising temple waste during Wednesday, presenting both the absolute number of each item and its corresponding percentage in the total waste. Notably, items such as flowers, garlands, and incense sticks are overwhelmingly predominant, each contributing 30 units and accounting for 100% of the waste. Conversely, items like plastics, clothes, and husk of coconut show zero units, signifying their complete absence from the waste composition. Additionally, while certain items like bel patri, dry fruits, and fruits have lower absolute quantities, their respective percentages. For instance, bel patri contributes 8 units, representing 26.667% of the waste, while dry fruits and fruits contribute 7 units (23.333%) and 1 unit (3.333%) respectively. This detailed analysis underscores the dominance of organic materials like flowers and incense

sticks in temple waste, while also shedding light on the absence or minimal presence of certain other items, providing valuable insights for waste management strategies.

Table 4.3.1.3 Type and amount of the waste

Items	**Amount of the waste**	
	in number	percentage
Flowers	30	100
Garland	30	100
Plastics	0	0
Incensive Sticks	30	100
Clothes	0	0
Bel Patri	8	26.667
Grains	2	6.667
Husk Of Coconut	0	0
Fruits	1	3.333
Dry Fruits	7	23.333

Source : Field survey



Source : Field survey

Fig 4.3.1.3 Type and amount of the waste

THURSDAY

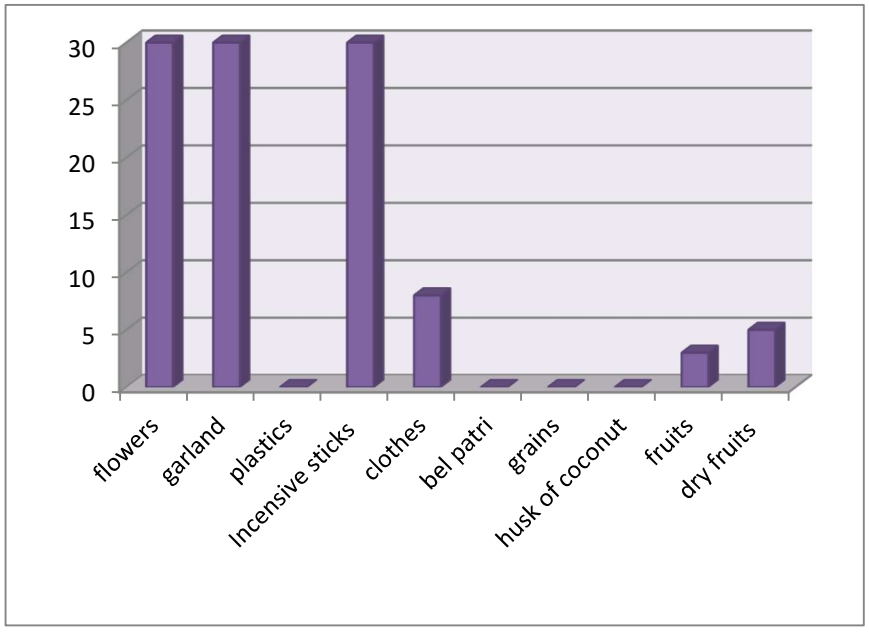
The table 4.3.4 , presents a quantitative breakdown of items found in temple waste during Thursday, providing both the absolute number of each item and its corresponding percentage in the total waste. Notably, items such as flowers, garlands, and incense sticks exhibit a substantial presence, with 30 units each, accounting for 100% of the waste. This indicates a consistent abundance of these items in temple waste . Certain items such as plastics, bel patri, grains, and husk of coconut are entirely absent from the waste composition, showing zero units and contributing 0% to the total waste.. Additionally, while clothes, fruits, and dry fruits have lower absolute quantities, their respective percentages highlight their relative significance in the waste composition. For instance, clothes contribute 8 units, representing 26.667% of the waste, while fruits and dry fruits contribute 3 units (10%) and 5 units (16.66666667%) respectively. This analysis underscores the predominance of organic materials like flowers and incense sticks in temple waste, while also highlighting the absence or minimal presence of certain other items.

Table 4.3.1.4 Type and amount of the waste

	Amount of the waste	
Items	in number	percentage
Flowers	30	100
Garland	30	100
Plastics	0	0
Incensive Sticks	30	100
Clothes	8	26.667
Bel Patri	0	0
Grains	0	0
Husk Of Coconut	0	0
Fruits	3	10

Dry Fruits	5	16.66666667

Source : Field survey



Source : Field survey

Fig 4.3.1.4 Type and amount of the waste

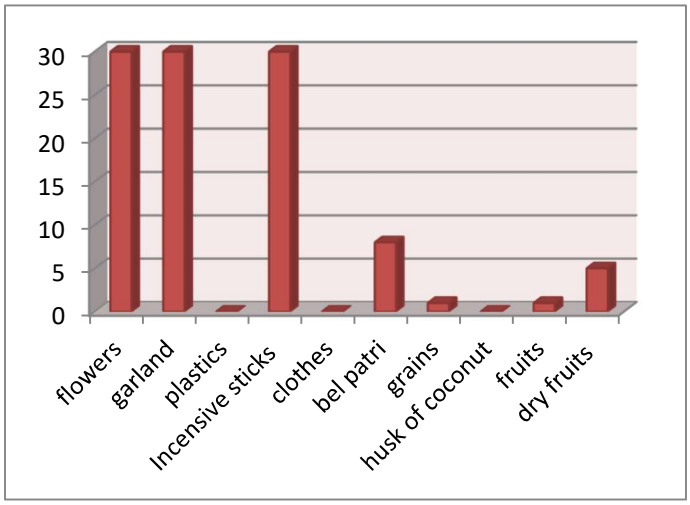
FRIDAY

The table 4.3.5, presents a detailed analysis of the items found in temple waste during Friday, offering insights into both the absolute quantities and their corresponding percentages in the total waste. Notably, items such as flowers, garlands, and incense sticks emerge as dominant constituents, with each registering 30 units and collectively comprising 100% of the waste. This suggests a consistent and substantial presence of these items in the waste generated by temple activities. Certain items like plastics, clothes, and husk of coconut are absent from the waste composition. Additionally, while items such as bel patri, grains, fruits, and dry fruits exhibit lower absolute quantities i.e , bel patri contributes 8 units, representing 26.66666667% of the waste, while grains, fruits, and dry fruits contribute 1 unit each (3.333333333% and 16.66666667% respectively). This analysis underscores the predominance of organic materials like flowers and incense sticks in temple waste, while also highlighting the absence or minimal presence of certain other items .

Table 4.3.1.5 Type and amount of the waste

	Amount of the waste	
Items	in number	percentage
Flowers	30	100
Garland	30	100
Plastics	0	0
Incensive Sticks	30	100
Clothes	0	0
Bel Patri	8	26.66666667
Grains	1	3.333333333
Husk Of Coconut	0	0
Fruits	1	3.333333333
Dry Fruits	5	16.66666667

Source : Field survey



Source : Field survey

Fig 4.3.1.5 Type and amount of the waste

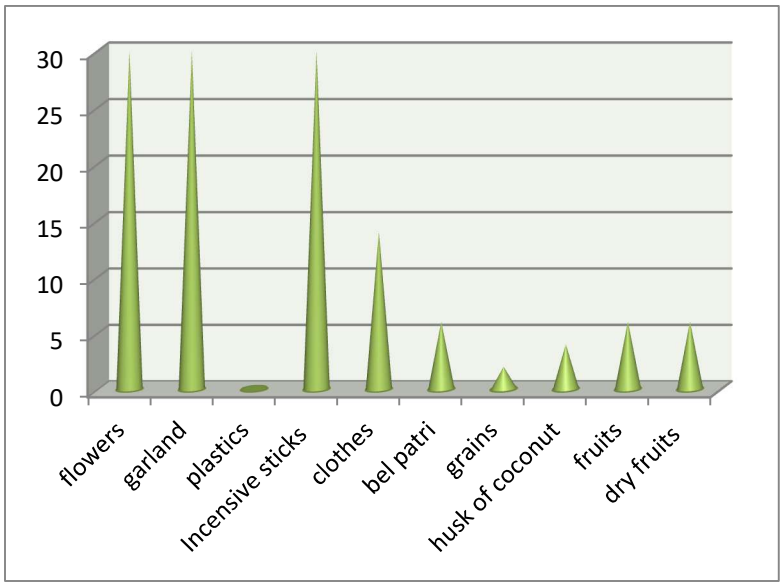
SATURDAY

The table 4.3.6 provides a detailed analysis of the items found in temple waste during Saturday, presenting both the absolute count of each item and its corresponding percentage in the total waste. Notably, items such as flowers, garlands, and incense sticks exhibit a significant presence, with 30 units each, collectively constituting 100% of the waste. Certain items such as plastics and grains are entirely absent from the waste composition, i.e zero units and contributing 0% to the total waste. Additionally, while clothes, bel patri, husk of coconut, fruits, and dry fruits have relatively lower absolute quantities i.e clothes contribute 14 units, representing 46.66666667% of the waste, while bel patri, husk of coconut, fruits, and dry fruits contribute 6 units each, accounting for 20% of the waste. This analysis underscores the diversity of materials present in temple waste, with organic items like flowers and incense sticks dominating while also emphasizing the absence or minimal presence of certain other items like plastics and grains.

Table 4.3.1.6 Type and amount of the waste

	Amount of the waste	
Items	in number	percentage
Flowers	30	100
Garland	30	100
Plastics	0	0
Incensive Sticks	30	100
Clothes	14	46.66666667
Bel Patri	6	20
Grains	2	6.666666667
Husk Of Coconut	4	13.33333333
Fruits	6	20
Dry Fruits	6	20

Source : Field survey



Source : Field survey

Fig 4.3.1.6 Type and amount of the waste

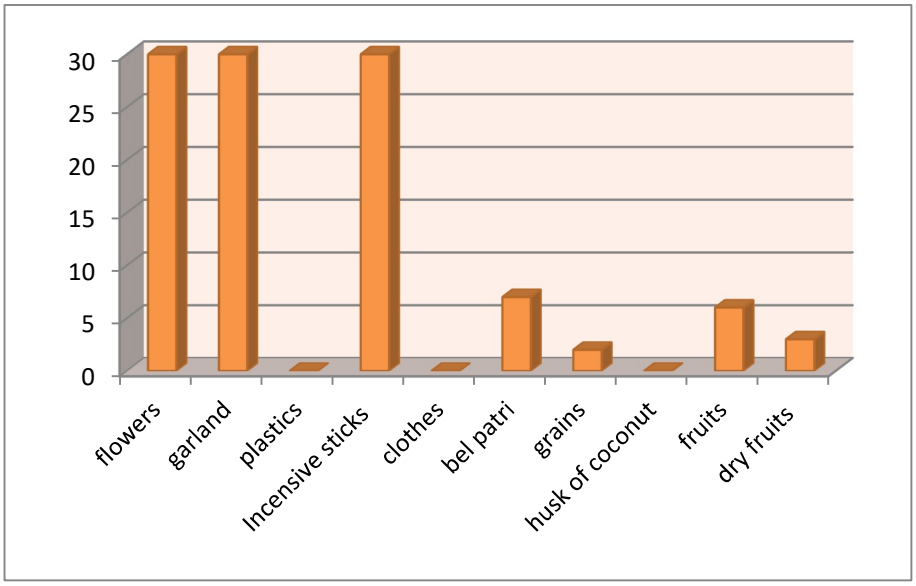
SUNDAY

The table 4.3.7, provides a detailed analysis of the items comprising temple waste during Sunday, presenting both the absolute count of each item and its corresponding percentage in the total waste. Notably, items such as flowers, garlands, and incense sticks exhibit a predominant presence, with 30 units each, collectively constituting 100% of the waste. Certain items such as plastics, clothes, and husk of coconut are entirely absent from the waste composition, registering zero units and contributing 0% to the total waste. Additionally, while bel patri, grains, fruits, and dry fruits have relatively lower absolute quantities, their respective percentages highlight their significance in the waste composition i.e bel patri contributes 7 units, representing 23.33333333% of the waste, while grains, fruits, and dry fruits contribute 2 units (6.666666667%), 6 units (20%), and 3 units (10%) respectively. This analysis underscores the diverse composition of temple waste, with organic items like flowers and incense sticks dominating, while also emphasizing the absence or minimal presence of certain other items

Table 4.3.1.7 Type and amount of the waste

	Amount of the waste	
items	in number	percentage
flowers	30	100
garland	30	100
plastics	0	0
Incensive sticks	30	100
clothes	0	0
bel patri	7	23.33333333
grains	2	6.666666667
husk of coconut	0	0
fruits	6	20
dry fruits	3	10

Source: Field survey



Source : Field survey

Fig 4.3.1.7 Type and amount of the waste

4.3.1 CONCLUSION

The most commonly or frequent generated items are Flowers, Garland, and Incense sticks, which are consistently used every day without variation. These items have a 100% presence throughout the week, indicating their high usage and importance in daily activities. Additionally, the Husk of coconut and plastics are used only once, with minimal presence, indicating its infrequent usage. Clothes, although used on most days, are not used at all on Friday, Saturday, and Sunday. This variability suggests that while clothes are essential, their usage might be subject to specific days or occasions. Bel patri shows slight variation in usage but is still used on most days. Grains and fruits also exhibit variable usage patterns, with lower consistency compared to other items. The analysis highlights the significance of certain items like flowers, garlands, and incense sticks, which are consistently used throughout the week. Conversely, items like plastics , husk of coconuts , clothes, grains , bel patri and dry fruits are used less frequently, with some not being used at all.

4.3.2 Quantity of the waste generated on each day from each temple

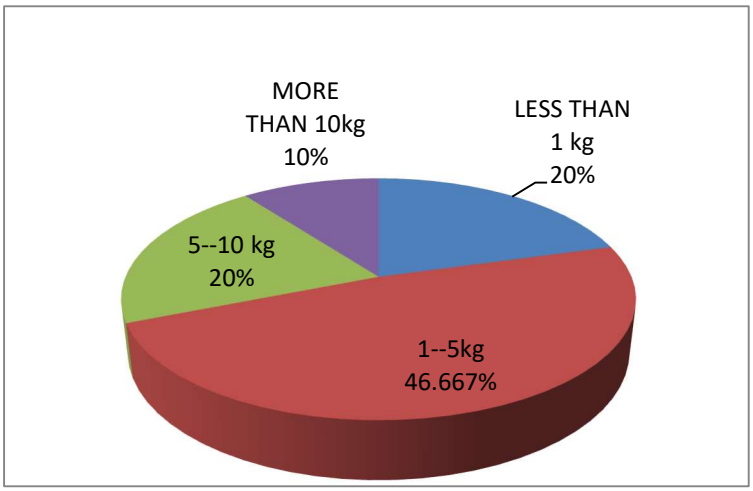
MONDAY

The data from table 4.3.2.1 categorizes waste quantities into different weight ranges and their corresponding percentages for Monday . It can be analysed that the majority of waste falls within the 1-5kg range, accounting for 46.667% of the total waste. This indicates that a significant portion of waste generated is moderate in quantity, likely comprising various materials from daily activities. Additionally, 20% of the waste is less than 1kg, suggesting a substantial amount of lighter waste items. Another 20% falls within the 5-10kg range, indicating a notable presence of heavier waste items. Lastly, 10% of the waste is categorized as more than 10kg, representing a smaller yet significant portion of the waste stream, likely comprising larger items or accumulations of waste. Overall, this analysis provides insights into the distribution of waste quantities, highlighting the varying weights of waste generated and underscoring the need for effective waste management practices to handle different types of waste efficiently.

Table 4.3.2.1 Quantity of the waste generated each day

less than 1kg	**20%**
1—5kg	46.667%
5-10kg	20%
more than 10kg	10%

Source : Field survey



Source : Field survey

Fig 4.3.2.1 Quantity of the waste generated each day

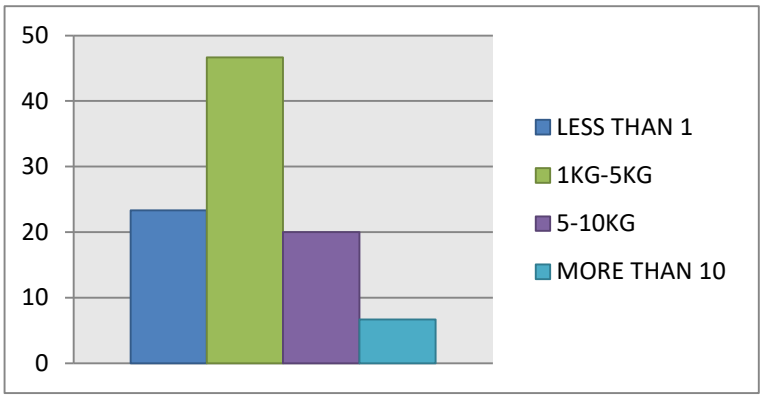
TUESDAY

The data from table 4.3.2.2 offers a breakdown of waste quantities into different weight categories along with their respective percentages for Tuesday . The majority of waste, constituting 46.667%, falls within the 1-5kg range, indicating a significant portion of moderate-sized waste items. Additionally, 23.33333% of the waste is less than 1kg, signifying a substantial presence of lighter waste materials. Another 20% falls within the 5-10kg range, suggesting a notable amount of heavier waste items. Lastly, 6.667% of the waste is categorized as more than 10kg, representing a smaller yet still significant portion of the waste stream, likely comprising larger or bulkier items. This analysis provides valuable insights into the distribution of waste quantities across different weight ranges, highlighting the varying sizes of waste items and underscoring the importance of effective waste management practices to handle diverse waste types efficiently.

Table 4.3.2.2 Quantity of the waste generated each day

less than 1kg	**23.33333%**
1—5kg	46.667%
5-10kg	20%
more than 10kg	6.667%

Source : Field survey



Source : Field survey

Fig 4.3.2.2 Quantity of the waste generated each day

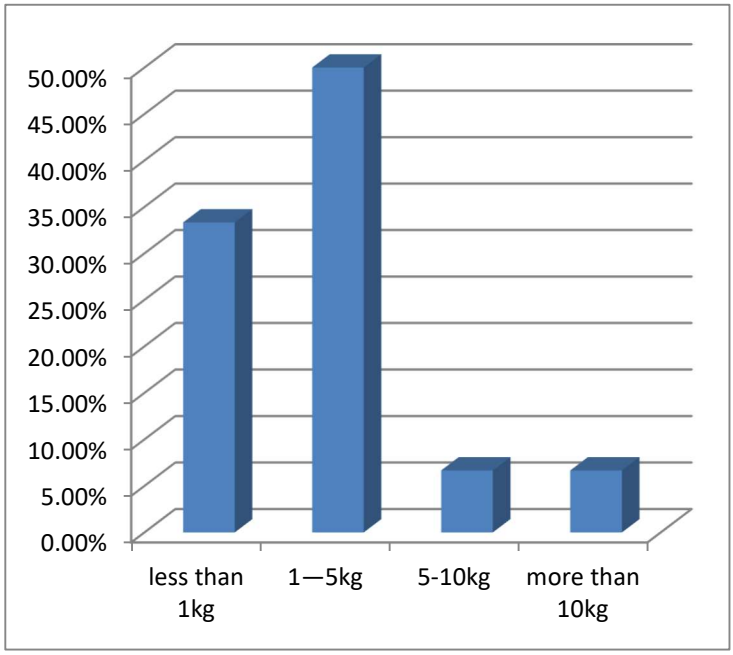
WEDNESDAY

The data from table 4.3.2.3 categorizes waste quantities into different weight ranges and their corresponding percentages for wednesday. It shows that the majority of waste, constituting 50%, falls within the 1-5kg range, indicating a significant proportion of waste is of moderate weight. Additionally, 33.3333% of the waste is less than 1kg, representing a substantial presence of lighter waste materials. Another 6.6667% falls within both the 5-10kg and more than 10kg ranges, suggesting smaller yet still notable portions of heavier waste items. This analysis reveals the distribution of waste quantities across various weight categories, emphasizing the prevalence of moderate-weight waste and the significant presence of lighter waste materials. It underscores the need for effective waste management strategies to handle diverse waste types efficiently, considering their varying weights and characteristics.

Table 4.3.2.3 Quantity of the waste generated each day

less than 1kg	**33.3333%**
1—5kg	50%
5-10kg	6.6667%
more than 10kg	6.6667%

Source : Field survey



Source : Field survey

Fig 4.3.2.3 Quantity of the waste generated each day

THURSDAY

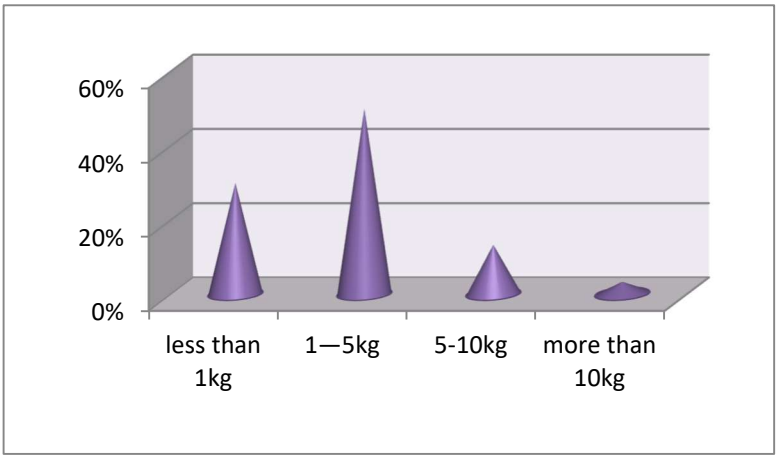
The data from table 4.3.2.4 offers insights into the distribution of waste quantities across different weight categories, along with their corresponding percentages for Thursday . The analysis reveals that the majority of waste, comprising 50%, falls within the 1-5kg range, indicating a significant portion of waste is of moderate weight. Additionally, 30% of the waste is less than 1kg, representing a substantial presence of lighter waste materials. Another 13.3333% falls within the 5-10kg range, suggesting a smaller yet notable portion of heavier waste items. Lastly, 3.33333% of the waste is categorized as more than 10kg, indicating a

relatively minor presence of larger or bulkier waste items. This breakdown highlights the diverse distribution of waste quantities across different weight ranges, emphasizing the prevalence of moderate-weight waste alongside lighter and heavier waste materials. Effective waste management strategies should consider these variations in waste weight to ensure efficient handling and disposal processes.

Table 4.3.2.4 Quantity of the waste generated each day

less than 1kg	**30%**
1—5kg	50%
5-10kg	13.3333%
more than 10kg	3.33333%

Source : Field survey



Source : Field survey

Fig 4.3.2.4 Quantity of the waste generated each day

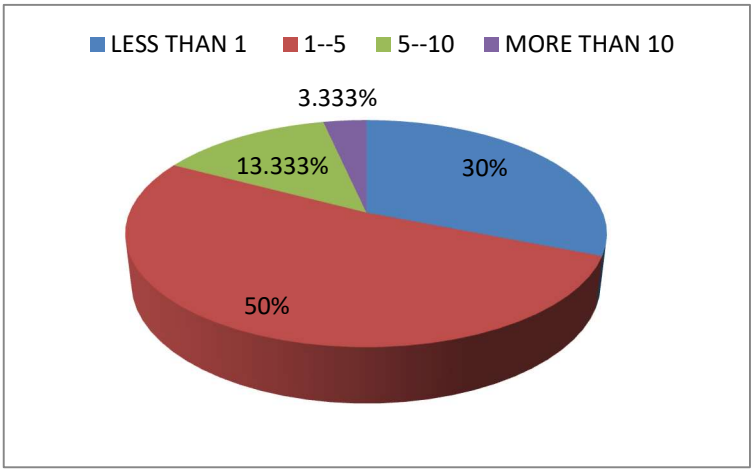
FRIDAY

The data from table 4.3.2.5 offers a breakdown of waste quantities into different weight categories and their corresponding percentages for Friday . It indicates that the majority of waste, comprising 50%, falls within the 1-5kg range, suggesting a significant proportion of waste consists of moderate-sized items. Additionally, 30% of the waste is less than 1kg, indicating a substantial presence of lighter waste materials. Another 13.333% falls within the 5-10kg range, implying a smaller yet notable portion of heavier waste items. Lastly, 3.333% of the waste is categorized as more than 10kg, representing a relatively minor presence of larger or bulkier waste items. This analysis highlights the diverse distribution of waste quantities across different weight ranges, underscoring the importance of considering variations in waste weight for effective waste management planning and implementation.

Table 4.3.2.5 Quantity of the waste generated each day

less than 1kg	**30%**
1—5kg	50%
5-10kg	13.333%
more than 10kg	3.333%

Source : Field survey



Source : Field survey

Fig 4.3.2.5 Quantity of the waste generated each day

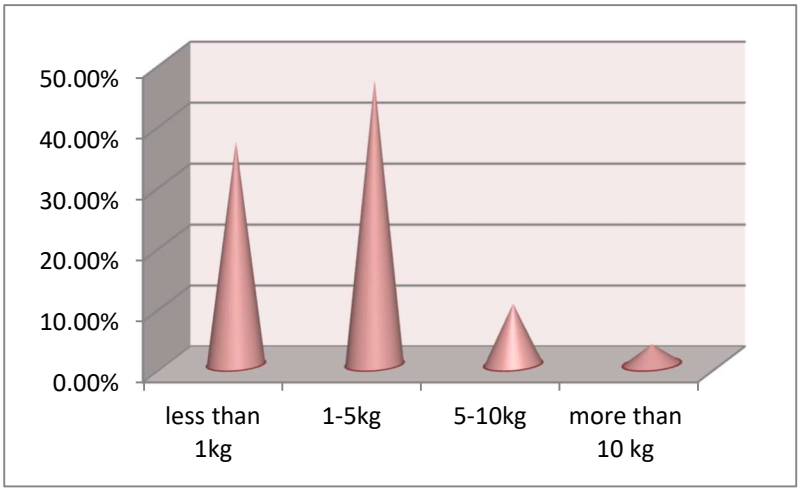
SATURDAY

The data from table 4.3.2.6 presents a breakdown of waste quantities into various weight categories along with their respective percentages for Saturday . It reveals that the highest proportion of waste, constituting 46.67%, falls within the 1-5kg range, indicating a substantial presence of moderate-sized waste items. Additionally, 36.67% of the waste is less than 1kg, suggesting a significant amount of lighter waste materials. Furthermore, 10% of the waste falls within the 5-10kg range, representing a smaller yet notable portion of heavier waste items. Lastly, only 3.33% of the waste exceeds 10kg, indicating a relatively minor presence of larger or bulkier waste items. This analysis underscores the diverse distribution of waste quantities across different weight categories, highlighting the prevalence of both light and moderate-weight waste materials. Effective waste management strategies should take into account these variations in waste weight to ensure appropriate handling and disposal practices.

Table 4.3.2.6 Quantity of the waste generated each day

less than 1kg	36.67%
1-5kg	46.67%
5-10kg	10%
more than 10 kg	3.33%

Source : Field survey



Source : Field survey

Fig 4.3.2.6 Quantity of the waste generated each day

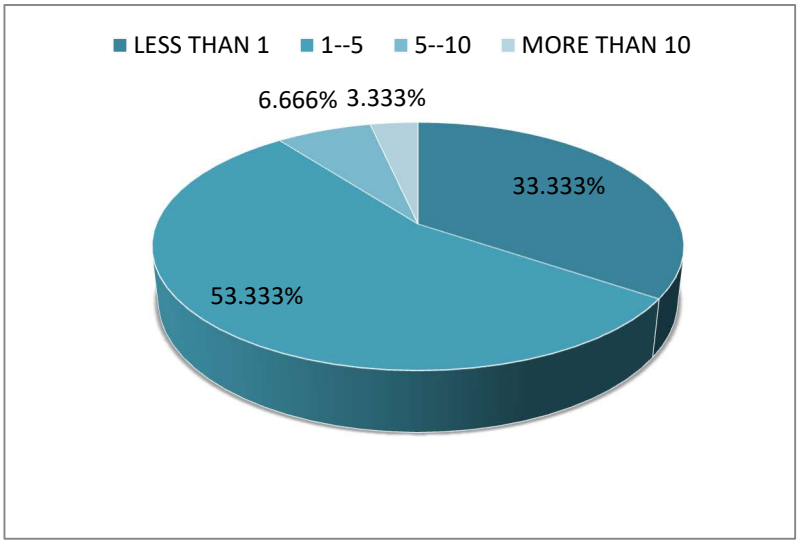
SUNDAY

The data from table 4.3.2.7 offers a breakdown of waste quantities into different weight categories and their corresponding percentages for Sunday. It reveals that the majority of waste, comprising 53.3333%, falls within the 1-5kg range, indicating a significant presence of moderate-sized waste items. Additionally, 33.333% of the waste is less than 1kg, suggesting a substantial amount of lighter waste materials. Furthermore, 6.6667% of the waste falls within the 5-10kg range, representing a smaller yet notable portion of heavier waste items. Lastly, only 3.33% of the waste exceeds 10kg, indicating a relatively minor presence of larger or bulkier waste items. This analysis highlights the diverse distribution of waste quantities across different weight categories, emphasizing the prevalence of both light and moderate-weight waste materials. Effective waste management strategies should consider these variations in waste weight to ensure efficient handling and disposal processes.

Table 4.3.2.7 Quantity of the waste generated each day

less than 1 kg	**33.333%**
1—5kg	53.3333%
5-10kg	6.6667%
more than 10kg	3.33%

Source : Field survey



Source : Field survey

Fig 4.3.2.7 Quantity of the waste generated each day

4.3.2CONCLUSION

The analysis reveals that smaller quantities of waste, specifically less than 1 kilogram and between 1 to 5 kilograms, consistently account for the majority of waste generation throughout the week. Larger quantities, categorized as 5 to 10 kilograms and more than 10 kilograms, represent a smaller portion of the overall waste produced. The data indicates a recurring pattern wherein approximately 30% to 33.333% of waste falls under the less than 1 kilogram category, and around 50% to 53.3333% falls within the 1 to 5 kilograms range across all days of the week. In contrast, the 5 to 10 kilograms and more than 10 kilograms categories fluctuate between 3.33% to 13.333%, indicating their sporadic occurrence. In essence, the analysis underscores the predominance of smaller quantities of waste and highlights the importance of managing these consistently occurring amounts while also being prepared to address the occasional presence of larger waste volumes. Regular monitoring of waste generation patterns facilitates effective waste management strategies and environmental stewardship.

4.3.3 Weekly quantity of the waste generation from each temple

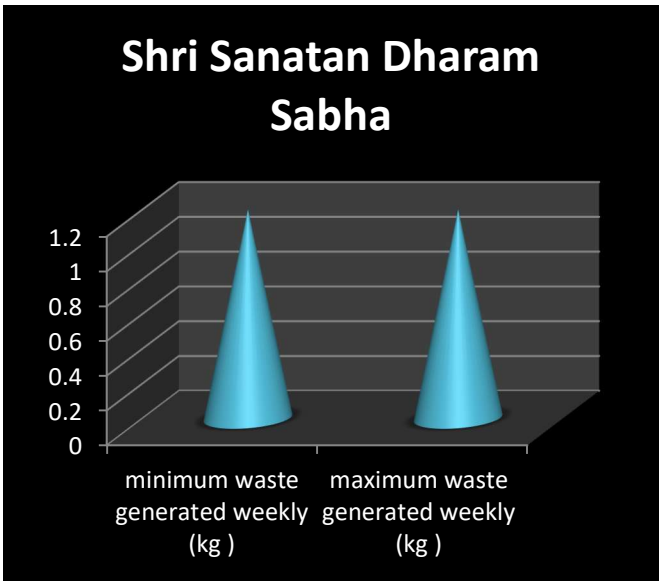
SHRI SANTAN DHARMA SABHA

The weekly waste generation data from table 4.3.3.1 for Shri Santan Dharama Sabha Temple reflects a stable waste production pattern, with both the minimum and maximum waste generation consistently recorded at 1.2 kilograms. This consistency suggests that the temple maintains a steady level of waste generation throughout the week, indicating perhaps a consistent flow of visitors or activities within the temple premises.

Table 4.3.3.1 Weekly quantity of waste generation for each temple

Name of the temple	**Shri santan dharama sabha**
minimum waste generation (kg)	1.2
maximum waste generation (kg)	1.2

Source : Field survey



Source : Field survey

Fig 4.3.3.1 Weekly quantity of waste generation for each temple

RADHA KRISHNA TEMPLE

The waste generation data from table 4.3.3.2 for Radha Krishna Temple illustrates a relatively moderate range in waste production, with a minimum of 1.75 kilograms and a maximum of 3.5 kilograms. This suggests a consistent but not overly high level of waste generation within the temple premises. The lower minimum waste generation may indicate periods of reduced activity or fewer visitors, while the higher maximum waste generation could correspond to busier days or events within the temple.

Table 4.3.3.2 Weekly quantity of waste generation for each temple

Name of the temple	**Radha Krishna temple**
minimum waste generation (kg)	1.75
maximum waste generation (kg)	3.5

Source : Field survey

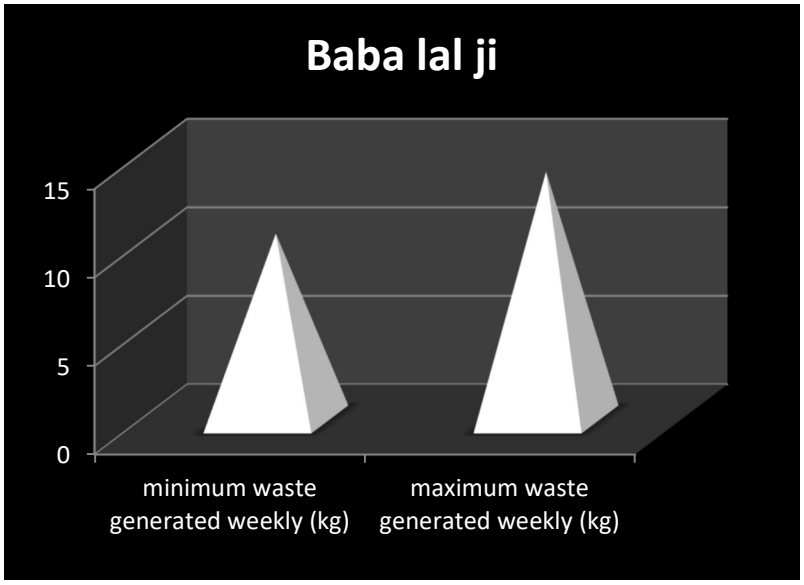
BABA LAL JI

The waste generation data from table 4.3.3.3 for Baba Lal Ji Temple reveals a significant range in waste production, with a minimum of 10.5 kilograms and a maximum of 14 kilograms. This indicates variability in waste generation within the temple premises, potentially influenced by factors such as the number of visitors, events, or religious ceremonies held at the temple. The higher maximum waste generation suggests peak periods of activity or events that result in increased waste production, while the lower minimum waste generation may reflect quieter periods with fewer visitors or activities.

Table 4.3.3.3Weekly quantity of waste generation for each temple

Name of the temple	**Baba lal ji**
minimum waste generation (kg)	10.5
maximum waste generation (kg)	14

Source : Field survey



Source : Field survey

Fig 4.3.3.2 Weekly quantity of waste generation for each temple

Fig 4.3. T 3.3Weekly quantity of waste generation for each temple

MANOKAMNA SIDH HANUMAN

The waste generation data from table 4.3.3.5 for Manokamna Sidh Hanuman Temple reveals a considerable range in waste production, with a minimum of 26 kilograms and a maximum of 33 kilograms. This indicates a significant volume of waste generated within the temple premises, potentially influenced by factors such as the size of the temple, the number of visitors, and the frequency of events or ceremonies held at the temple. The higher maximum waste generation suggests periods of heightened activity or events that result in increased waste production, while the lower minimum waste generation may represent relatively quieter days with fewer visitors or activities. Analyzing this data provides valuable insights into the temple's waste generation patterns, highlighting the need for robust waste management strategies to effectively handle and dispose of the generated waste.

Table 4.3.3.4 Weekly quantity of waste generation for each temple

Name of the temple	**Manokamna Sidh Hanuman**
minimum waste generation (kg)	26
maximum waste generation (kg)	33

Source : Field survey

Source : Field survey

Fig 4.3.3.4 Weekly quantity of waste generation for each temple

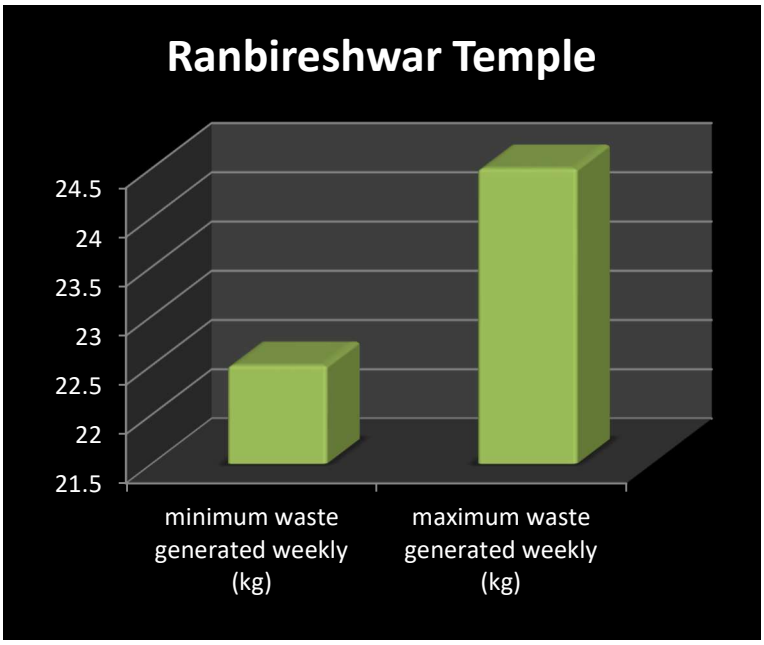
RANBIRESHWAR TEMPLE

The waste generation data from table 4.3.3.5 for Ranbireshwar Temple demonstrates a relatively consistent waste production pattern, with a minimum of 22.5 kilograms and a maximum of 24.5 kilograms. This suggests that the temple maintains a stable level of waste generation within this range, with minimal fluctuations in the amount of waste produced over time. Such consistency may indicate a regular flow of visitors or activities within the temple premises, resulting in a predictable amount of waste generated on a consistent basis. Analyzing this data provides insights into the temple's waste generation dynamics, allowing for the implementation of effective waste management strategies tailored to handle this consistent volume of waste

Table 4.3.3.5Weekly quantity of waste generation for each temple

Name of the temple	Ranbireshwar temple
minimum waste generation (kg)	22.5
maximum waste generation (kg)	24.5

Source : Field survey



Source : Field survey

Fig 4.3.3.5Weekly quantity of waste generation for each temple

PANJBHAKTAR TEMPLE

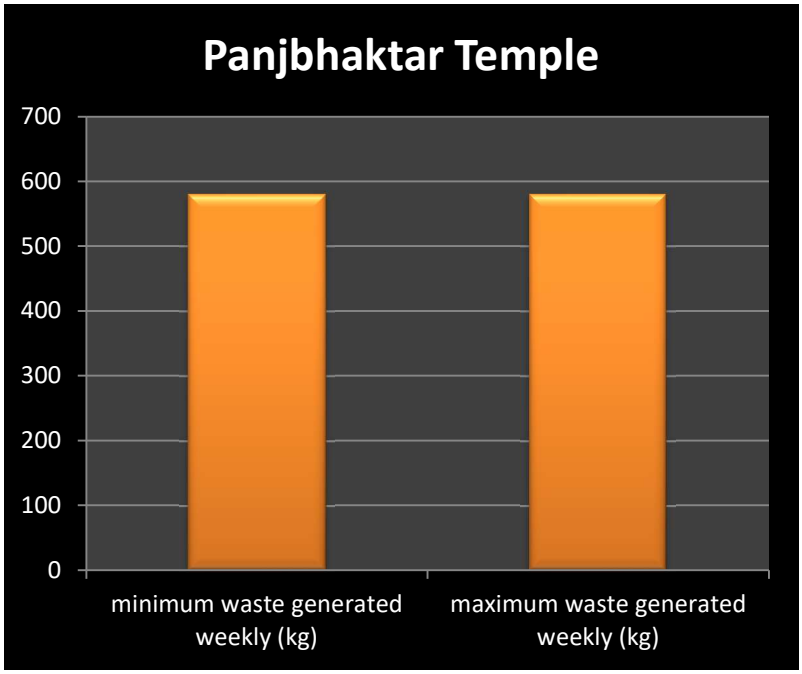
The waste generation data from table 4.3.3.6 for Panjbhaktar Temple indicates a consistent waste production pattern, with both the minimum and maximum waste generation recorded at 580 kilograms. This suggests that the temple consistently produces a significant amount of waste, likely influenced by factors such as its size, the number of visitors, and the frequency of events or ceremonies held at the temple. Such a consistent volume of waste generation underscores the importance of implementing robust waste management strategies to handle this substantial amount of waste effectively. Measures such as frequent waste collection,

proper waste segregation, and promoting recycling initiatives are essential to manage the considerable volume of waste generated by the temple and support its efforts towards environmental sustainability.

Table 4.3.3.6 Weekly quantity of waste generation for each temple

Name of the temple	**Panjbhaktar temple**
minimum waste generation (kg)	580
maximum waste generation (kg)	580

Source : Field survey



Source : Field survey

Fig 4.3.3.6 Weekly quantity of waste generation for each temple

PRACHEEN HANUMAN MANDIR

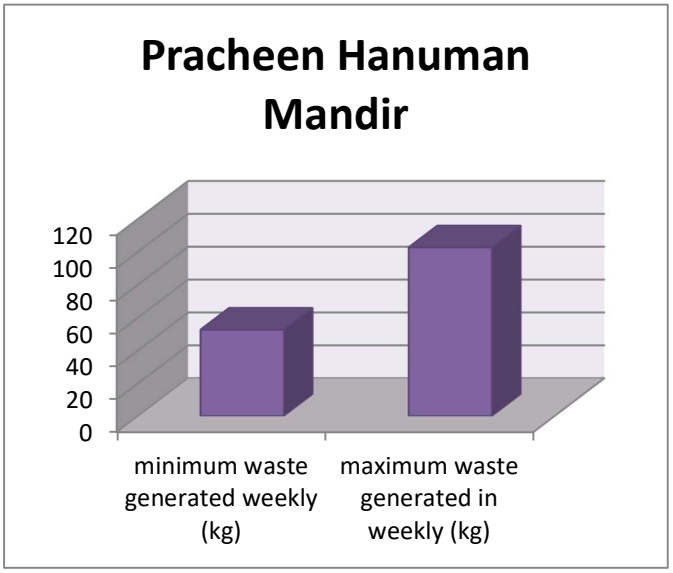
The waste generation data from table 4.3.3.7 for Pracheen Hanuman Mandir reveals a significant range in waste production, with a minimum of 52.6 kilograms and a maximum of

102.7 kilograms. This indicates variability in waste generation within the temple premises, likely influenced by factors such as the size of the temple, the number of visitors, and the frequency of events or ceremonies held at the temple. The higher maximum waste generation suggests peak periods of activity or events that result in increased waste production, while the lower minimum waste generation may reflect quieter periods with fewer visitors or activities. Analyzing this data provides valuable insights into the temple's operations and waste generation patterns, highlighting the need for adaptive waste management strategies.

Table 4.3. 3.7Weekly quantity of waste generation for each temple

Name of the temple	**Pracheen Hanuman mandir**
minimum waste generation (kg)	52.6
maximum waste generation (kg)	102.7

Source : Field survey



Source : Field survey

Fig 4.3. 3.7Weekly quantity of waste generation for each temple

RADHA KRISHNA TEMPLE

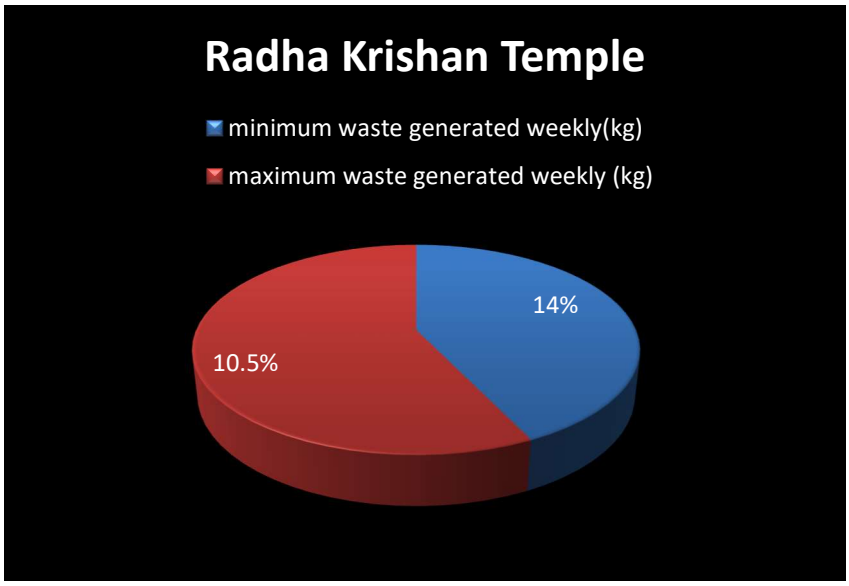
The waste generation data from table 4.3.3.8 for Radha Krishan Temple shows a range in waste production, with a minimum of 10.5 kilograms and a maximum of 14 kilograms. This suggests variability in waste generation within the temple premises, likely influenced by

factors such as the number of visitors, events, or ceremonies held at the temple. The higher maximum waste generation may correspond to busier days with increased activity or events, resulting in higher waste production, while the lower minimum waste generation may indicate quieter periods with fewer visitors or activities. Analyzing this data provides insights into the temple's waste generation patterns, emphasizing the need for adaptable waste management strategies.

Table 4.3.3.8Weekly quantity of waste generation for each temple

Name of the temple	**Radha Krishan temple**
minimum waste generation (kg)	10.5
maximum waste generation (kg)	14

Source : Field survey



Source : Field survey

Table 4.3.3.8Weekly quantity of waste generation for each temple

SHEVA VALI MATA

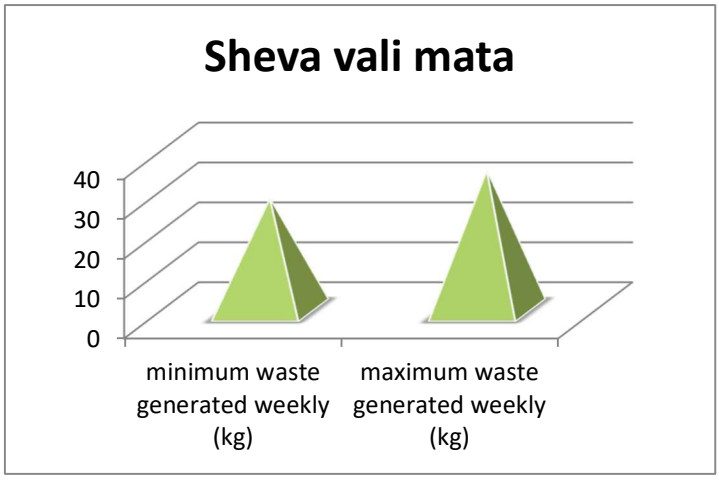
The waste generation data from table 4.3.3.9 for Sheva Vali Mata Temple indicates a range in waste production, with a minimum of 28 kilograms and a maximum of 35 kilograms. This variability suggests fluctuations in waste generation within the temple premises, likely

influenced by factors such as the number of visitors, events, or religious activities taking place at the temple. The higher maximum waste generation may correspond to periods of increased activity or special events, leading to a higher volume of waste generated, while the lower minimum waste generation may indicate quieter periods with fewer visitors or activities. Analyzing this data provides insights into the temple's waste generation patterns and highlights the importance of implementing adaptable waste management strategies. These strategies may include flexible waste collection schedules to accommodate fluctuations in waste generation, proper waste segregation practices to facilitate efficient waste handling, and initiatives to promote waste reduction and recycling.

Table 4.3.3.9Weekly quantity of waste generation for each temple

Name of the temple	**Sheva vali mata**
minimum waste generation (kg)	28
maximum waste generation (kg)	35

Source : Field survey



Source : Field survey

Fig 4.3.3.9Weekly quantity of waste generation for each temple

SHIV SHAKTI TEMPLE

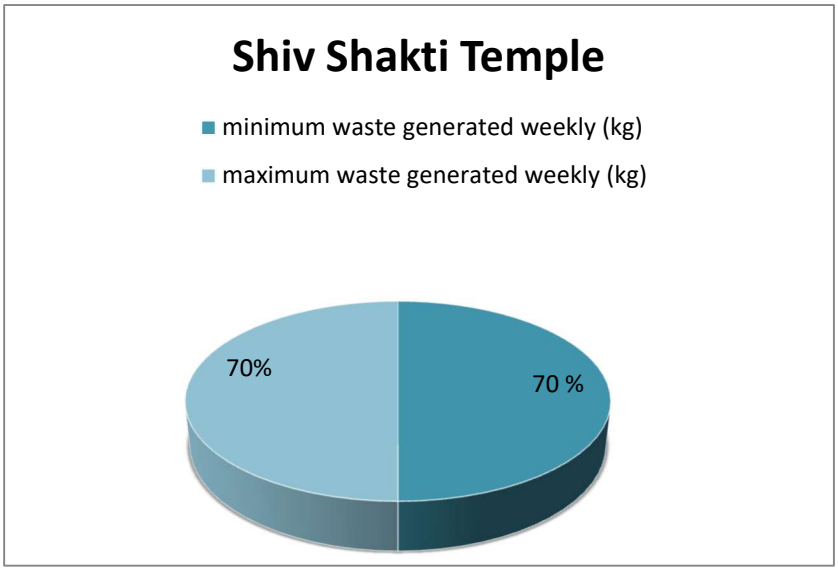
The waste generation data from table 4.3.3.10 for Shiv Shakti Temple indicates a consistent waste production pattern, with both the minimum and maximum waste generation recorded at 70 kilograms. This suggests that the temple consistently produces a uniform amount of waste,

without significant fluctuations in waste generation over time. Such consistency may be influenced by factors such as the temple's size, the number of visitors, and the types of activities or ceremonies held at the temple. Analyzing this data highlights the importance of implementing robust waste management strategies to handle this consistent volume of waste effectively.

Table 4.3.3.10 Weekly quantity of waste generation for each temple

Name of the temple	**Shiv shakti temple**
minimum waste generation (kg)	70
maximum waste generation (kg)	70

Source : Field survey



Source : Field survey

Fig 4.3.3.10 Weekly quantity of waste generation for each temple

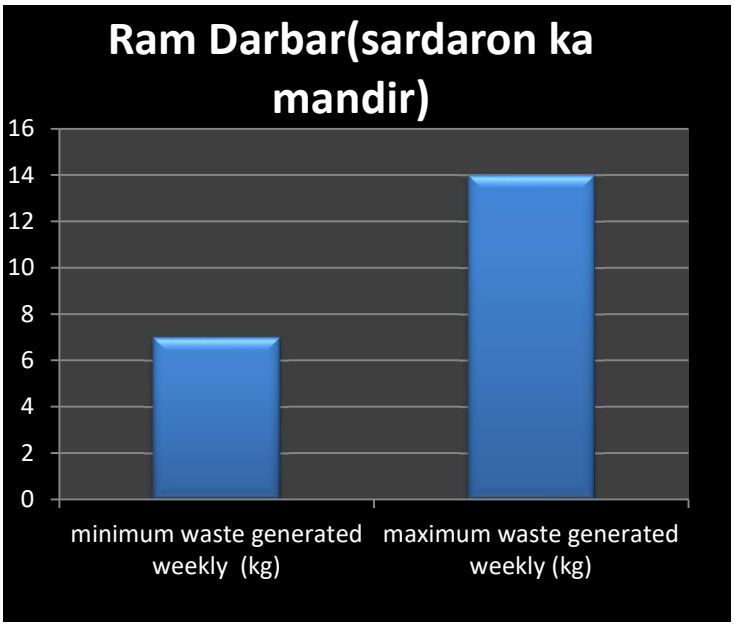
RAM DARBAR SARDARON DA MANDIR

The waste generation data from table 4.3.3.11 for Ram Darbaar Sardaron Da Mandir displays a range in waste production, with a minimum of 7 kilograms and a maximum of 14 kilograms. This variance suggests fluctuations in waste generation within the temple premises, likely influenced by factors such as the number of visitors, events, or ceremonies held at the temple. The higher maximum waste generation may correspond to periods of increased activity or special events, leading to a higher volume of waste generated, while the lower minimum waste generation may indicate quieter periods with fewer visitors or activities. Analyzing this data provides insights into the temple's waste generation patterns, emphasizing the need for adaptable waste management strategies

Table 4.3.3.11Weekly quantity of waste generation for each temple

Name of the temple	**Ram darbaar sardaron da mandir**
minimum waste generation (kg)	7
maximum waste generation (kg)	14

Source Field survey



Source : Field survey

Fig 4.3.3.11Weekly quantity of waste generation for each temple

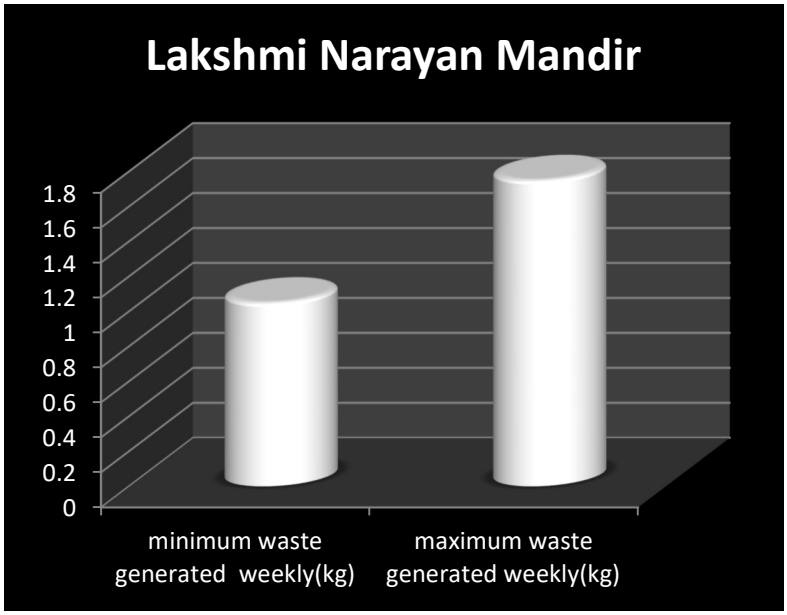
LAXMI NARAYAN MANDIR

The waste generation data from table 4.3.3.12 for Lakshmi Narayan Mandir reveals a relatively narrow range in waste production, with a minimum of 1.05 kilograms and a maximum of 1.75 kilograms. This suggests consistent waste generation within the temple premises, with minimal fluctuations in the amount of waste produced over time. Such consistency indicates a stable visitor numbers or regular activities within the temple. Analyzing this data provides insights into the temple's waste generation patterns, emphasizing the importance of implementing efficient waste management strategies tailored to handle this consistent volume of waste.

Table 4.3.3.12 Weekly quantity of waste generation for each temple

Name of the temple	**Lakshami Narayan mandir**
minimum waste generation (kg)	1.05
maximum waste generation (kg)	1.75

Source : Field survey



Source : Field survey

Fig 4.3.3.12 Weekly quantity of waste generation for each temple

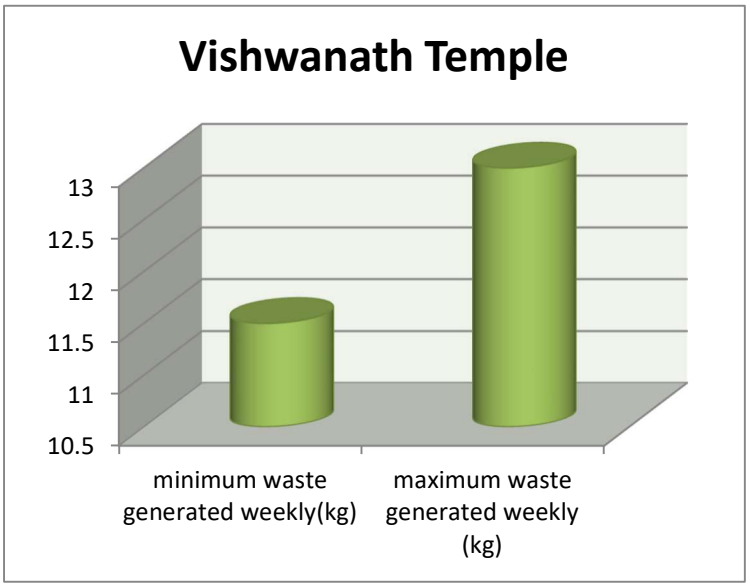
VISHWANATH TEMPLE

The waste generation data from table 4.3.13 for Vishwanath Temple demonstrates a relatively narrow range in waste production, with a minimum of 11.5 kilograms and a maximum of 13 kilograms. This suggests a consistent level of waste generation within the temple premises, with minimal fluctuations in the amount of waste produced over time. Such consistency may be influenced by factors such as stable visitor numbers or regular religious activities held at the temple. Analyzing this data provides insights into the temple's waste generation patterns and underscores the importance of implementing efficient waste management strategies tailored to handle this consistent volume of waste.

Fig 4.3.3.13 Weekly quantity of waste generation for each temple

Name of the temple	**Vishwanath temple**
minimum waste generation (kg)	11.5
maximum waste generation (kg)	13

Source : Field survey



Source : Field survey

Fig 4.3. T 3.13Weekly quantity of waste generation for each temple

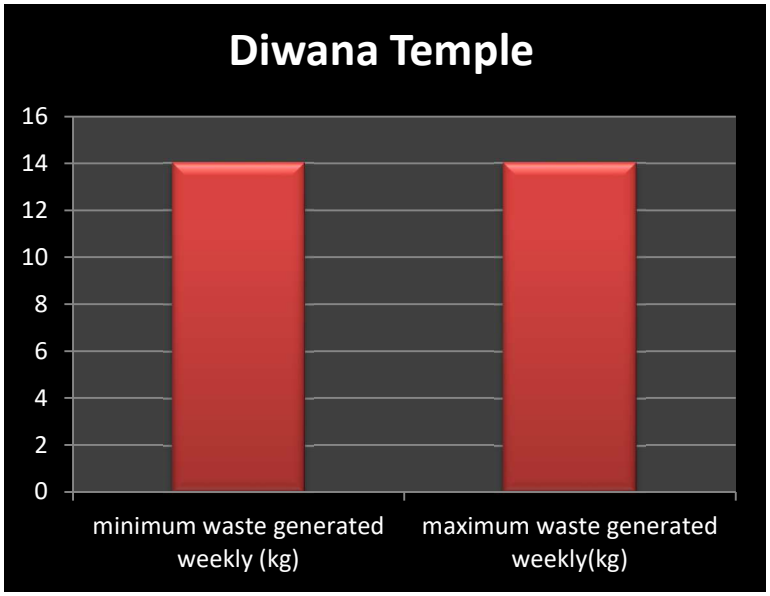
DIWANA TEMPLE

The waste generation data from table 4.3.14 for Diwana Temple indicates a consistent waste production pattern, with both the minimum and maximum waste generation recorded at 14 kilograms. This suggests that the temple consistently produces the same amount of waste without significant fluctuations over time. Such consistency may be influenced by factors such as stable visitor numbers or regular religious activities conducted at the temple. Analyzing this data highlights the importance of implementing effective waste management strategies to handle this consistent volume of waste efficiently.

Table 4.3.3.14 Weekly quantity of waste generation for each temple

Name of the temple	**Diwana Temple**
minimum waste generation (kg)	14
maximum waste generation (kg)	14

Source : Field survey



Source : Field survey

Fig 4.3.3.14 Weekly quantity of waste generation for each temple

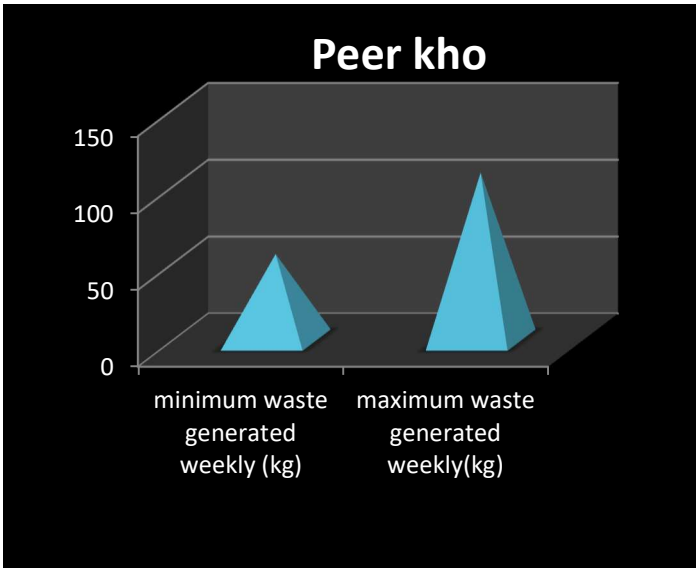
PEER KHO TEMPLE

The waste generation data from table 4.3.3.15 for Peer Kho Temple exhibits a notable range in waste production, with a minimum of 56 kilograms and a maximum of 109 kilograms. This variability suggests significant fluctuations in waste generation within the temple premises, potentially influenced by factors such as the number of visitors, events, or religious ceremonies held at the temple. The higher maximum waste generation may correspond to periods of increased activity or special events, resulting in a higher volume of waste generated, while the lower minimum waste generation may indicate quieter periods with fewer visitors or activities. Analyzing this data provides valuable insights into the temple's waste generation patterns and highlights the need for adaptable waste management strategies.

Table 4.3.3.15 Weekly quantity of waste generation for each temple

Name of the temple	**Peer kho**
minimum waste generation (kg)	56
maximum waste generation (kg)	109

Source : Field survey



Source : Field survey

Fig 4.3.3.15 Weekly quantity of waste generation for each temple

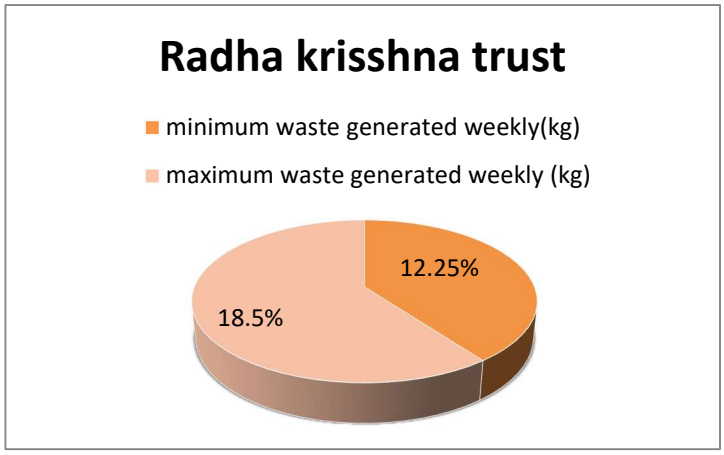
RADHA KRISHNA TRUST

The waste generation data from table 4.3.3.16 for Radha Krishna Temple reveals a range in waste production, with a minimum of 12.25 kilograms and a maximum of 18.5 kilograms. This variance suggests fluctuations in waste generation within the temple premises, potentially influenced by factors such as visitor traffic, events, or religious activities occurring at the temple. The higher maximum waste generation may correspond to periods of heightened activity or special occasions, resulting in increased waste production, while the lower minimum waste generation may indicate quieter times with fewer visitors or events . Analyzing this data provides insights into the temple's waste generation patterns, emphasizing the importance of implementing adaptable waste management strategies.

Table 4.3.3.16 Weekly quantity of waste generation for each temple

Name of the temple	**Radha krishna temple**
minimum waste generation (kg)	12.25
maximum waste generation (kg)	18.5

Source : Field survey



Source : Field survey

Fig 4.3.3.16 Weekly quantity of waste generation for each temple

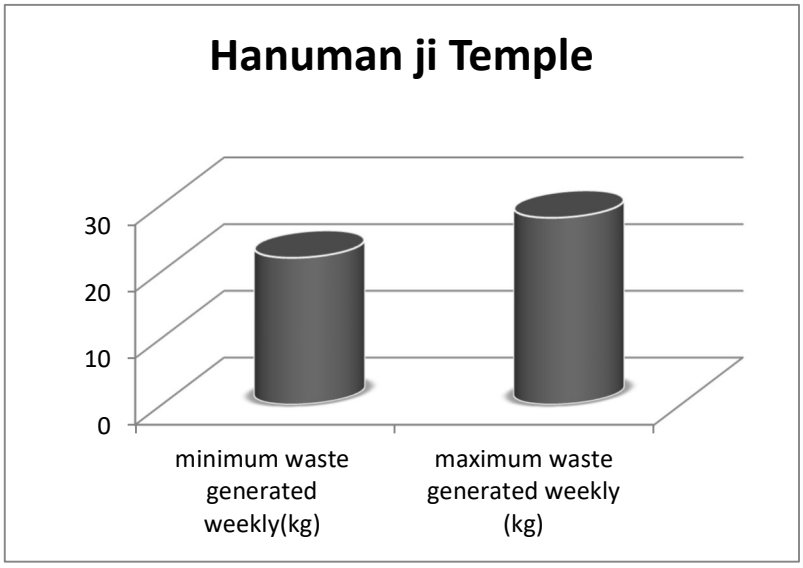
HANUMANJI TEMPLE

The waste generation data from table 4.3.3.17 for Hanumanji Temple displays a range in waste production, with a minimum of 22 kilograms and a maximum of 28 kilograms. This variation suggests fluctuations in waste generation within the temple premises, likely influenced by factors such as the number of visitors, events, or religious ceremonies held at the temple. The higher maximum waste generation may correspond to periods of increased activity or special events, resulting in a greater volume of waste generated, while the lower minimum waste generation may indicate quieter periods with fewer visitors or activities. Analyzing this data provides insights into the temple's waste generation patterns and emphasizes the importance of implementing adaptable waste management strategies.

Table 4.3.3.17Weekly quantity of waste generation for each temple

Name of the temple	**Hanumanji temple**
minimum waste generation (kg)	22
maximum waste generation (kg)	28

Source : Field survey



Source : Field survey

Fig 4.3.3.17Weekly quantity of waste generation for each temple

HARI HAR TEMPLE

The waste generation data from table4.3.3.18 for Hri Har Temple indicates a minimal range in waste production, with a minimum of 0.35 kilograms and a maximum of 0.7 kilograms. Such a narrow variance suggests consistent waste generation within the temple premises, likely influenced by factors such as the size of the temple, the number of visitors, and the types of activities or ceremonies conducted at the temple. Analyzing this data highlights the temple's commitment to environmental stewardship and effective waste management practices, even with limited waste production

Table 4.3.3.18 Weekly quantity of waste generation for each temple

Name of the temple	**Hri har temple**
minimum waste generation (kg)	0.35
maximum waste generation (kg)	0.7

Source : Field survey

Source : Field survey

Fig 4.3.3.18 Weekly quantity of waste generation for each temple

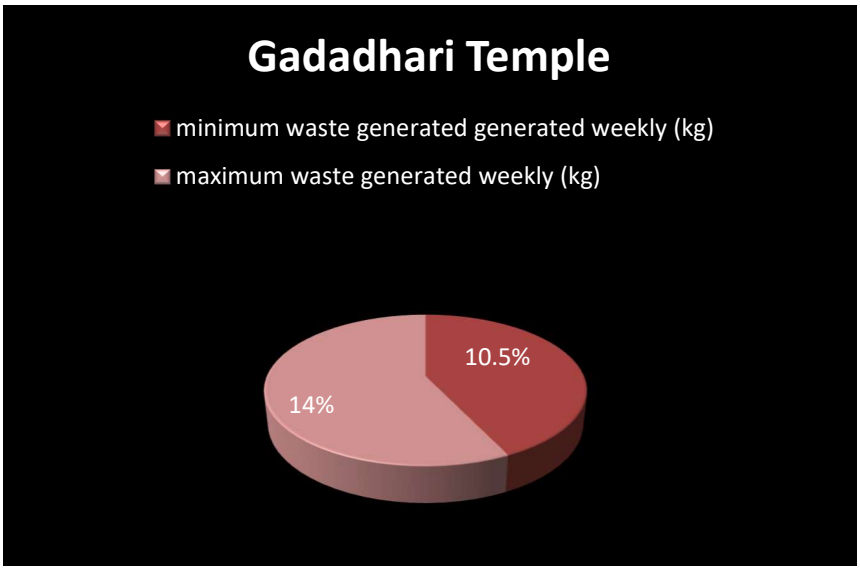
GADHADHARI TEMPLE

The waste generation data from table 4.3.3.19 for Gadhadhari Temple illustrates a consistent range in waste production, with a minimum of 10.5 kilograms and a maximum of 14 kilograms. This suggests a stable level of waste generation within the temple premises, likely influenced by factors such as regular visitor footfall and the frequency of events or ceremonies held at the temple. Analyzing this data emphasizes the importance of implementing effective waste management strategies to handle this consistent volume of waste efficiently.

Table 4.3.3.19 Weekly quantity of waste generation for each temple

Name of the temple	**Gadhadhari temple**
minimum waste generation (kg)	10.5
maximum waste generation (kg)	14

Source : Field survey



Source : Field survey

Fig 4.3.3.19 Weekly quantity of waste generation for each temple

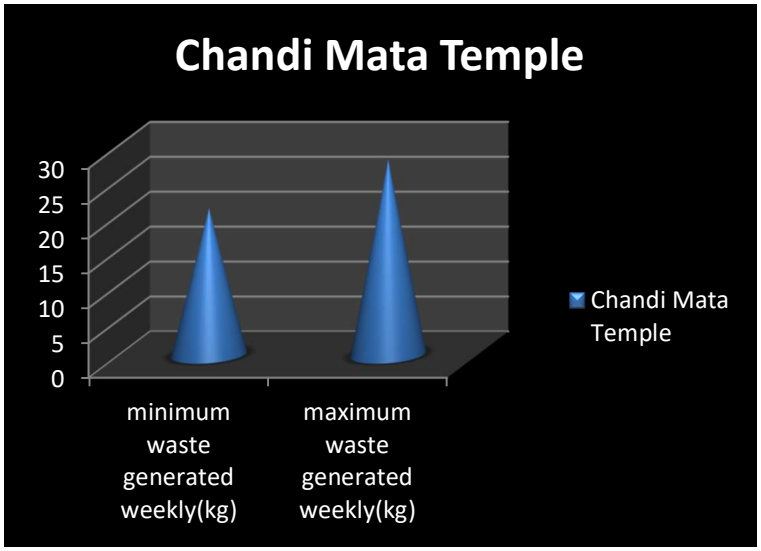
CHANDI MATA TEMPLE

The waste generation data from table 4.3.3.20 for Chandi Mata Temple displays a range in waste production, with a minimum of 21 kilograms and a maximum of 28 kilograms. This variance suggests fluctuations in waste generation within the temple premises, likely influenced by factors such as the number of visitors, events, or religious ceremonies held at the temple. The higher maximum waste generation may correspond to periods of increased activity or special events, resulting in a greater volume of waste generated, while the lower minimum waste generation may indicate quieter periods with fewer visitors or activities.Analyzing this data provides insights into the temple's waste generation patterns and underscores the importance of implementing adaptable waste management strategies.

Table 4.3.3.20 Weekly quantity of waste generation for each temple

Name of the temple	**Chandi mata temple**
minimum waste generation (kg)	21
maximum waste generation (kg)	28

Source : Field survey



Source : Field survey

Fig 4.3. T 3.20 Weekly quantity of waste generation for each temple

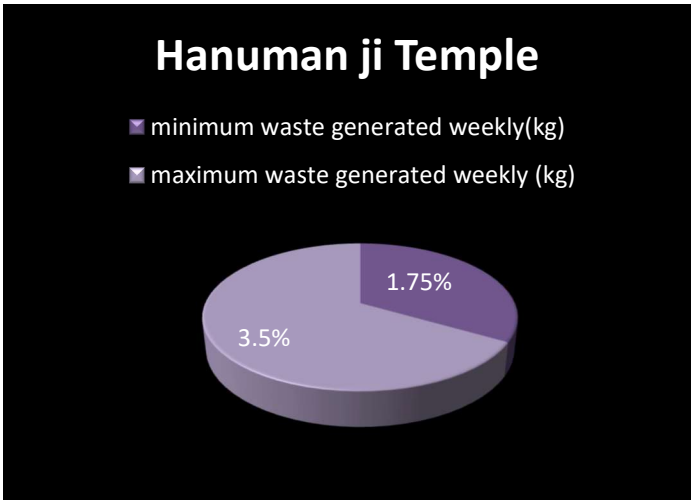
HANUMANJI TEMPLE

The waste generation data from table 4.3.3.21 for Hanumanji Temple reveals a range in waste production, with a minimum of 1.75 kilograms and a maximum of 3.5 kilograms. This variation suggests fluctuations in waste generation within the temple premises, likely influenced by factors such as the number of visitors, events, or religious ceremonies held at the temple. The higher maximum waste generation may correspond to periods of increased activity or special events, resulting in a greater volume of waste generated, while the lower minimum waste generation may indicate quieter periods with fewer visitors or activities. Analyzing this data provides insights into the temple's waste generation patterns and emphasizes the importance of implementing adaptable waste management strategies.

Table 4.3.3.21Weekly quantity of waste generation for each temple

Name of the temple	**Hanumanji temple**
minimum waste generation (kg)	1.75
maximum waste generation (kg)	3.5

Source : Field survey



Source : Field survey

Fig 4.3.3.21Weekly quantity of waste generation for each temple

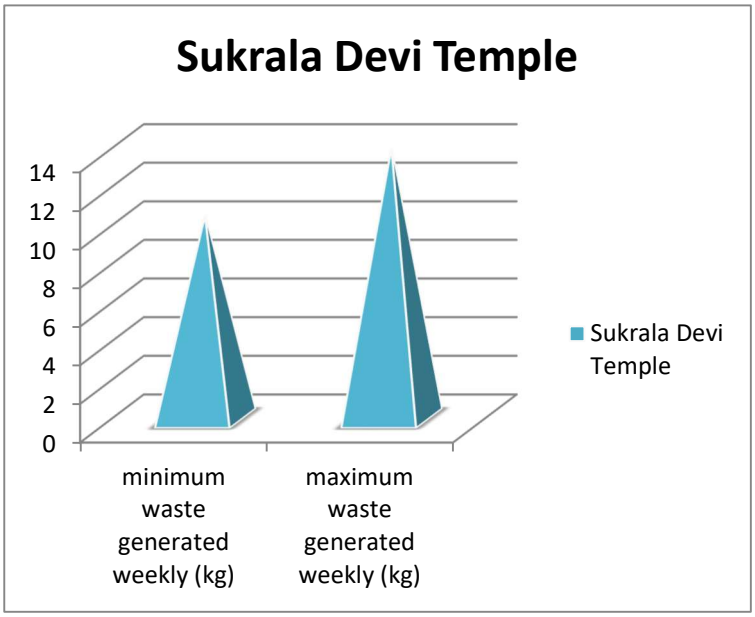
SUKRALA DEVI TEMPLE

The waste generation data from table 4.3.3.21 for Sukral Devi Temple illustrates a consistent range in waste production, with a minimum of 10.5 kilograms and a maximum of 14 kilograms. This suggests a steady level of waste generation within the temple premises, likely influenced by factors such as regular visitor footfall and the frequency of events or ceremonies held at the templeAnalyzing this data underscores the importance of implementing effective waste management strategies to handle this consistent volume of waste efficiently.

Table 4. 3 . 3.22 Weekly quantity of waste generation for each temple

Name of the temple	**Sukral devi temple**
minimum waste generation (kg)	10.5
maximum waste generation (kg)	14

Source : Field survey



Source : Field survey

Fig 4.3.3.22 Weekly quantity of waste generation for each temple

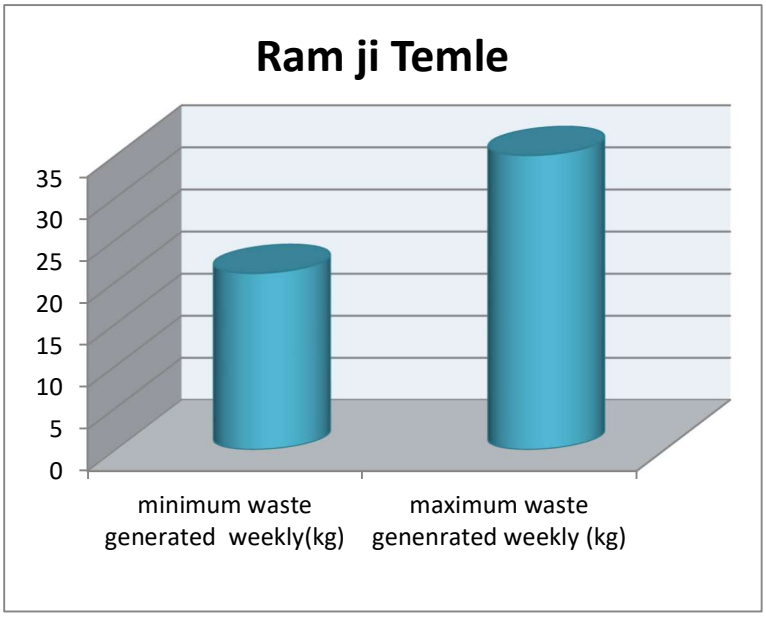
RAMJI TEMPLE

The waste generation data from table 4.3.3.23 for Ram Ji Temple demonstrates a range in waste production, with a minimum of 21 kilograms and a maximum of 35 kilograms. This variability suggests fluctuations in waste generation within the temple premises, potentially influenced by factors such as the number of visitors, events, or religious ceremonies held at the temple. The higher maximum waste generation may correspond to periods of increased activity or special events, resulting in a greater volume of waste generated, while the lower minimum waste generation may indicate quieter periods with fewer visitors or activities. Analyzing this data provides insights into the temple's waste generation patterns and emphasizes the importance of implementing adaptable waste management strategies.

Table 4.3.3.23 Weekly quantity of waste generation for each temple

Name of the temple	**Ram ji temple**
minimum waste generation (kg)	21
maximum waste generation (kg)	35

Source : Field survey



Source : Field survey

Fig 4.3.3.23 Weekly quantity of waste generation for each temple

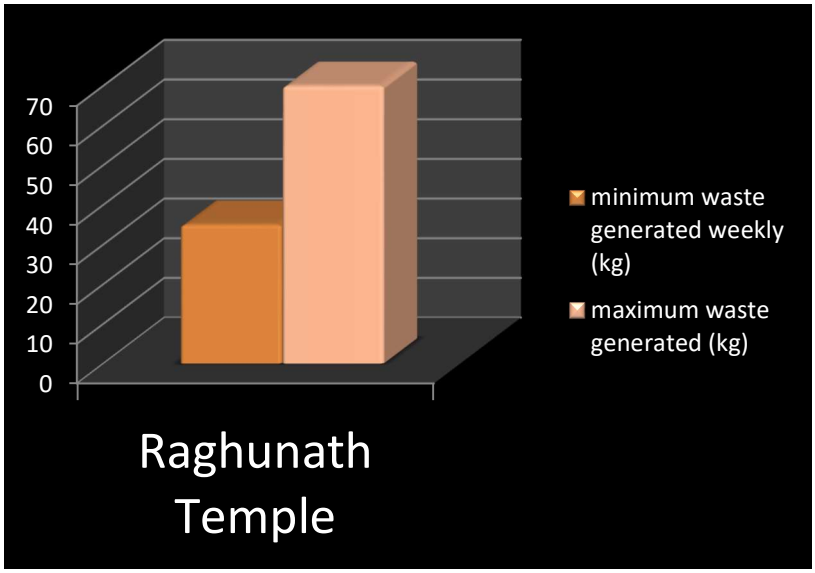
RAGHUNATH TEMPLE

The waste generation data from table 4.3.3.24 for Raghunath Temple displays a significant range in waste production, with a minimum of 35 kilograms and a maximum of 70 kilograms. This variance suggests notable fluctuations in waste generation within the temple premises, likely influenced by factors such as the number of visitors, events, or religious ceremonies held at the temple. The higher maximum waste generation may correspond to periods of increased activity or special events, resulting in a greater volume of waste generated, while the lower minimum waste generation may indicate quieter periods with fewer visitors or activities.Analyzing this data provides insights into the temple's waste generation patterns and underscores the importance of implementing adaptable waste management strategies.

Table 4.3.3.24 Weekly quantity of waste generation for each temple

Name of the temple	**Raghunath temple**
minimum waste generation (kg)	35
maximum waste generation (kg)	70

Source : Field survey



Source : Field survey

Fig 4.3.3.24 Weekly quantity of waste generation for each temple

BABA BAWARI DAS TEMPLE

The waste generation data from table 4.3.3.25 for Baba Bawari Das Temple indicates a consistent range in waste production, with a minimum of 21 kilograms and a maximum of 28 kilograms. This suggests a stable level of waste generation within the temple premises, likely influenced by factors such as regular visitor footfall and the frequency of events or ceremonies held at the temple. Analyzing this data emphasizes the importance of implementing effective waste management strategies to handle this consistent volume of waste efficiently.

Table 4.3.3.25 Weekly quantity of waste generation for each temple

Name of the temple	**Baba bawari das temple**
minimum waste generation (kg)	21
maximum waste generation (kg)	28

Source : Field survey

Source : Field survey

Fig 4.3.3.25 Weekly quantity of waste generation for each temple

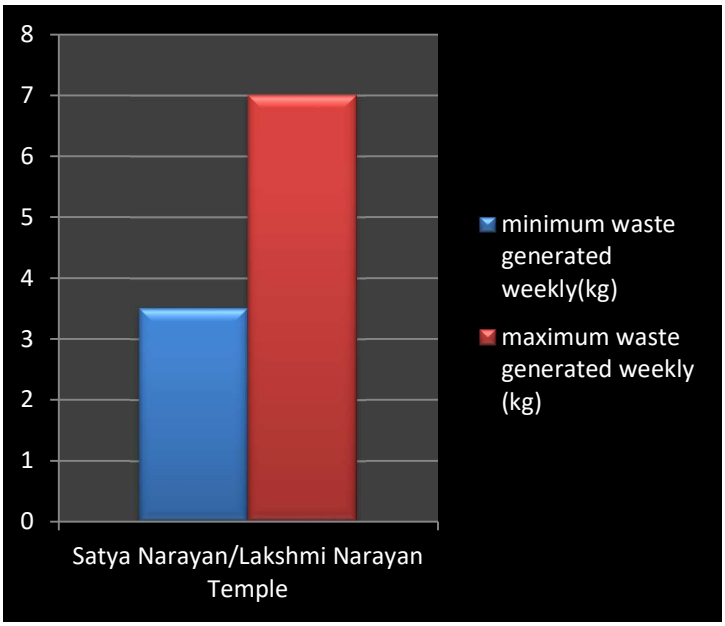
SATYA NARAYAN / LAXMI NARAYAN TEMPLE

The waste generation data from table 4.3.3.26 for Satya Narayan / Lakshmi Narayan Temple reflects a consistent range in waste production, with a minimum of 3.5 kilograms and a maximum of 7 kilograms. This suggests a steady level of waste generation within the temple premises, likely influenced by factors such as regular visitor footfall and the frequency of events or ceremonies held at the temple.Analyzing this data underscores the importance of implementing effective waste management strategies to handle this consistent volume of waste efficiently

Table 4.3.3.26 Weekly quantity of waste generation for each temple

Name of the temple	**Satya narayan / lakshmi narayan temple**
minimum waste generation (kg)	3.5
maximum waste generation (kg)	7

Source : Field survey



Source : Field survey

Fig 4.3. T 3.27 Weekly quantity of waste generation for each temple

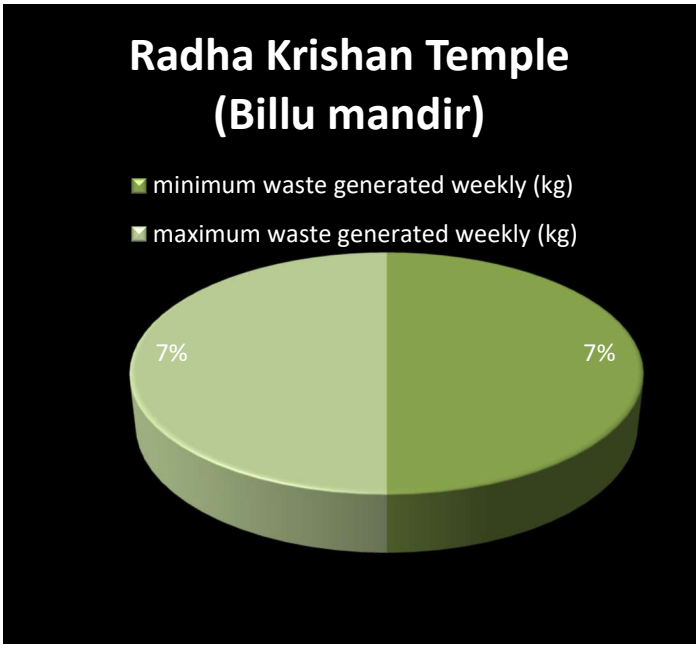
RADHA KRISHNA TEMPLE / BILLU MANDI

The waste generation data from table 4.3.3.27 for Radha Krishna Temple indicates a consistent waste production pattern, with both the minimum and maximum waste generation recorded at 7 kilograms. This suggests that the temple consistently produces the same amount of waste without significant fluctuations over time. Such consistency may be influenced by factors such as stable visitor numbers or regular religious activities conducted at the temple. Analyzing this data highlights the temple's commitment to effective waste management practices, even with limited waste production.

Table 4.3.3.27 Weekly quantity of waste generation for each temple

Name of the temple	**Radha Krishna temple**
minimum waste generation (kg)	7
maximum waste generation (kg)	7

Source : Field survey



Source : Field survey

Fig 4.3.3.27 Weekly quantity of waste generation for each temple

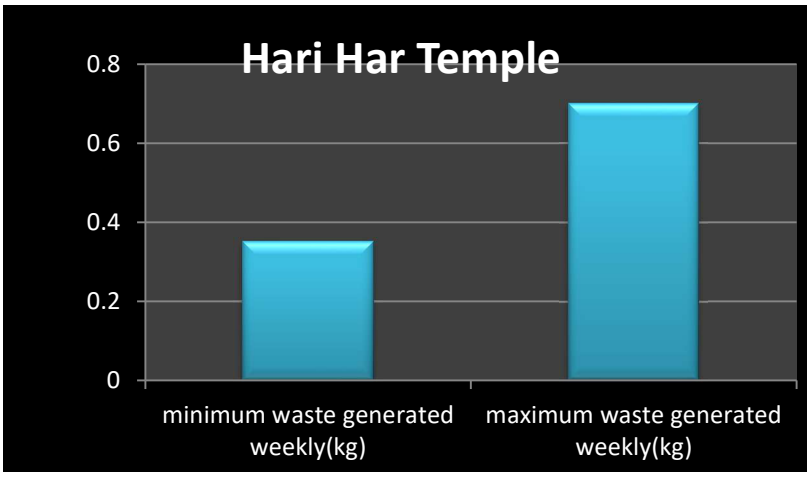
HARI HAR TEMPLE

The waste generation data from table 4.3.3.28 for Hari Har Temple illustrates a range in waste production, with a minimum of 14 kilograms and a maximum of 21 kilograms. This variance suggests fluctuations in waste generation within the temple premises, likely influenced by factors such as the number of visitors, events, or religious ceremonies held at the temple. The higher maximum waste generation may correspond to periods of increased activity or special events, resulting in a greater volume of waste generated, while the lower minimum waste generation may indicate quieter periods with fewer visitors or activities Analyzing this data provides insights into the temple's waste generation patterns and emphasizes the importance of implementing adaptable waste management strateg

Table 4.3.3.28 Weekly quantity of waste generation for each temple

Name of the temple	**Hari Har temple**
minimum waste generation (kg)	14
maximum waste generation (kg)	21

Source : Field survey



Source : Field survey

Fig 4.3.3.28 Weekly quantity of waste generation for each temple

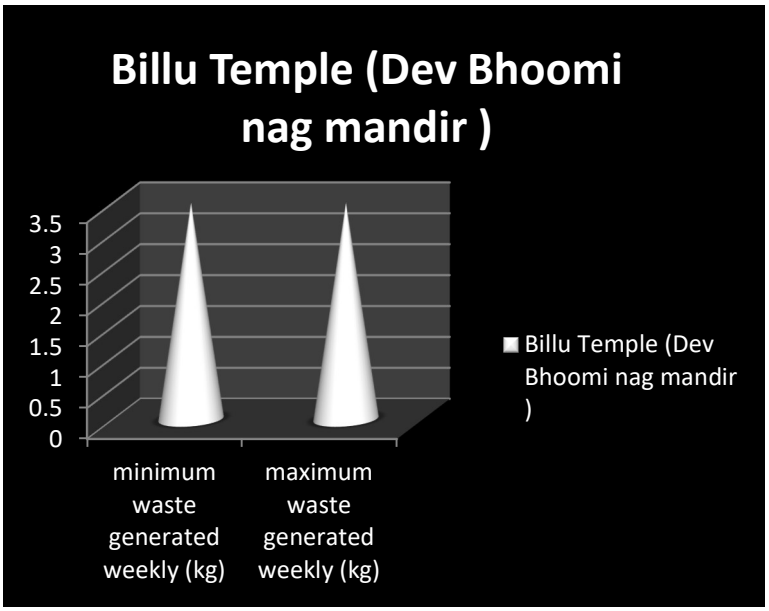
BILLU TEMPLE DEV BHOOMI

The waste generation data from table 4.3.3.29 for Billu Temple (Dev Bhoomi Temple) indicates a consistent waste production pattern, with both the minimum and maximum waste generation recorded at 3.5 kilograms. This suggests that the temple consistently produces the same amount of waste without significant fluctuations over time. Such consistency may be influenced by factors such as stable visitor numbers or regular religious activities conducted at the temple. Analyzing this data highlights the temple's commitment to effective waste management practices, even with limited waste production.

Table 4.3.3.29 Weekly quantity of waste generation for each temple

Name of the temple	**Billu Temple (dev bhoomi temple)**
minimum waste generation (kg)	3.5
maximum waste generation (kg)	3.5

Source : Field survey



Source : Field survey

Fig 4.3.3.29 Weekly quantity of waste generation for each temple

4.3.3 CONCLUSION

Temples with high waste generation quantities may have larger congregations, frequent events, or extensive facilities contributing to increased waste production. Panjbhaktar Temple: Maximum waste generation of 580 kg. Pracheen Hanuman Mandir: Maximum waste generation of 102.7 kg. Peer Kho: Maximum waste generation of 109 kg. Shiv Shakti Temple: Maximum waste generation of 70 kg. Ram Ji Temple: Maximum waste generation of 35 kg. Sheva Vali Mata: Maximum waste generation of 35 kg. Raghunath Temple: Maximum waste generation of 70 kg Conversely, temples with low waste generation may have fewer visitors or more efficient waste management practices in place. Shri Santan Dharama Sabha: Minimum and maximum waste generation of 1.2 kg. Lakshami Narayan Mandir: Minimum waste generation of 1.05 kg and maximum waste generation of 1.75 kg Hri Har Temple: Minimum waste generation of 0.35 kg and maximum waste generation of 0.7 kg. Billu Temple (Dev Bhoomi Temple): Minimum and maximum waste generation of 3.5 kg. Satya Narayan / Lakshmi Narayan Temple: Minimum waste generation of 3.5 kg and maximum waste generation of 7 kg. Radha Krishna Temple (one entry): Minimum and maximum waste generation of 7 kg. Diwana Temple: Minimum and maximum waste generation of 14 kg.

Thus , continuous monitoring and analysis of waste generation patterns can aid in identifying areas for improvement and implementing tailored solutions to address waste management challenges effectively.

4.3.4 Current Handling of the temple waste

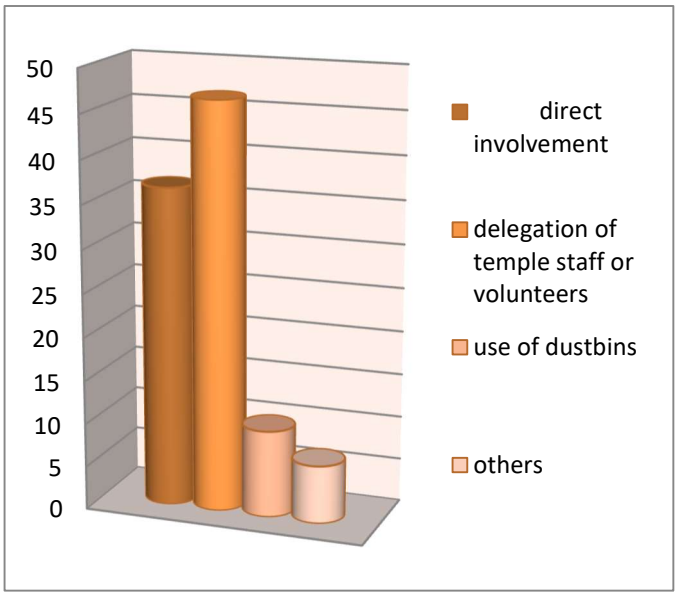
The data from table 4.3.4 underscores the waste management practices in temples, with 36.67% of temples indicating direct involvement in waste disposal and recycling efforts. Additionally, 46.67% of temples delegate waste management tasks to temple staff or volunteers. Despite this, only 10% of temples rely on the use of dustbins for waste collection, suggesting potential gaps in infrastructure or awareness. Moreover, approximately 6.67% of temples employ alternative methods for waste management. These findings underscore the importance of tailored strategies to address waste management challenges effectively. Through community engagement, resource utilization, and innovative approaches, temples can serve as catalysts for promoting environmental sustainability and responsible waste management practices.

Continued efforts in this direction will contribute to cleaner, greener environments and enhanced well-being for temple communities.

Table 4.3.4 Current Handling of the waste

direct involvement	**36.66666667**
delegation of temple staff or volunteers	**46.66666667**
use of dustbins	**10**
others	**6.666666667**

Source : Field survey



Source : Field survey

Fig 4.3.4 Current Handling of the waste

4.3.5 Usage of dustbins by the temples based on responses from respondents

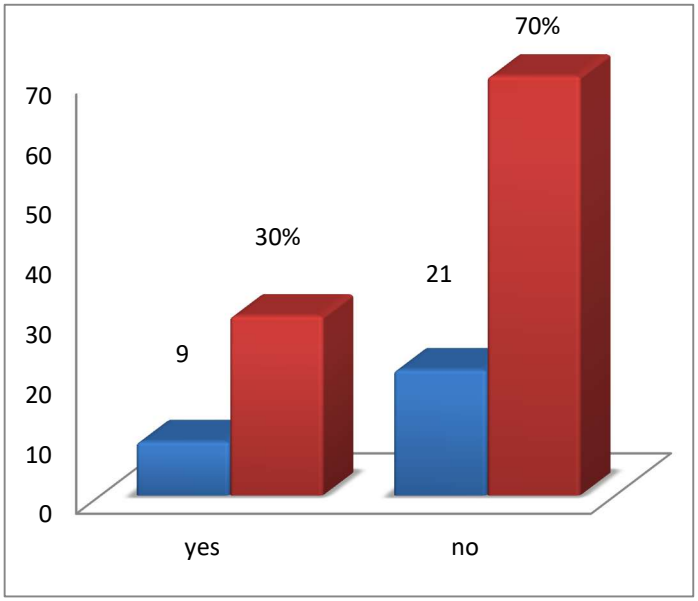
The data from table 4.3.5.1 on the usage of dustbins by temples indicates a notable disparity, with only 30% responding affirmatively ("YES") and the majority, 70%, indicating negatively ("NO"). This suggests that dustbin utilization within temple premises is not widely adopted. The prevalent "NO" responses highlight potential challenges or gaps in waste management infrastructure or practices within temple settings. Enhancing awareness and promoting the importance of proper waste disposal methods could address this issue. Implementing initiatives to encourage dustbin usage can significantly contribute to maintaining cleanliness, improving

waste management efficiency, and fostering a more sustainable environment within temple premises.

Table 4.3.5.1 Usage of dustbins

	Yes	No
In Number	9	21
In Percent	30	70

Source : Field survey



Source : Field survey

Fig 4.3.5 Usage of dustbins

4.3.6 Celebration of important events and festivals

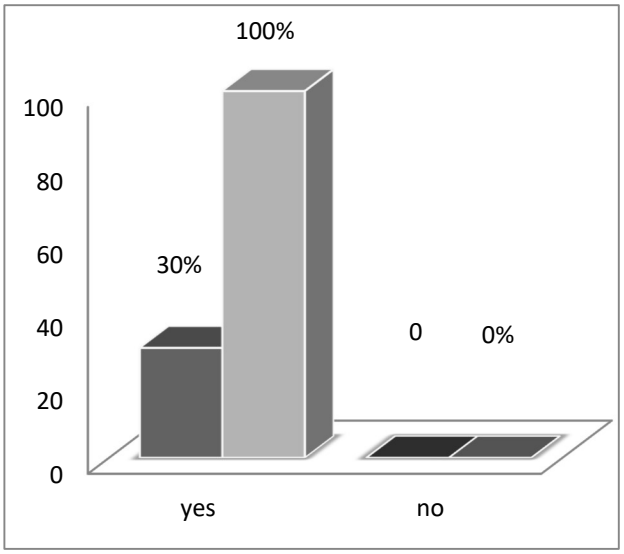
Based on the data from table 4.3.6.1, it can be analyzed that events are universally celebrated within the temples surveyed. All respondents, accounting for 100% of the sample, confirmed the celebration of events, while none reported otherwise. This unanimous affirmation underscores the significant role of events within temple culture, indicating widespread participation and engagement in various festivities or religious observances. Such high participation rates reflect the cultural and spiritual significance attached to these events, fostering community cohesion and deepening religious practices. Overall, it can also be

highlighted that the events and festivals plays important or crucial role in temple settings and underscores their integral role in fostering communal bonds and spiritual growth within the temple community.

Table 4.3.6 Celebration of events and festivals

	Yes	No
In number	30	0
In percent	100	0

Source : Field survey



Source : Field survey

Fig 4.3.6 Celebration of events and festivals

4.3.7 Celebration of each events and festivals in the temples

The provided data from table 4.3.7.1 offers a comprehensive glimpse into the vibrant tapestry of religious and cultural celebrations within the temple community. Each event listed represents a unique moment of spiritual significance, fostering deep connections and strengthening community bonds among devotees. At the forefront of these celebrations is Shivratri, occurring nine times and constituting 30% of the total events observed. Shivratri holds profound reverence among devotees as a day dedicated to honoring Lord Shiva,

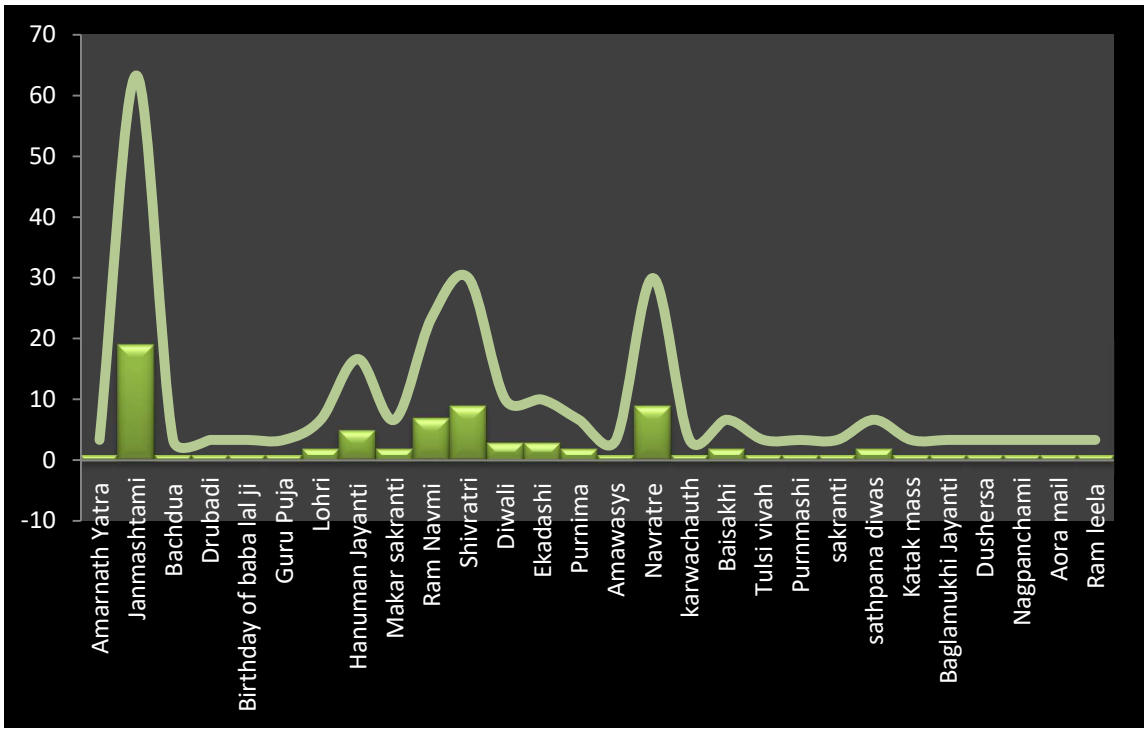
symbolizing introspection, devotion, and spiritual awakening. Its frequent occurrence underscores its central role in the spiritual calendar of the temple community. Following closely is Janmashtami, celebrated a remarkable 19 times, comprising 63.33% of the events. Janmashtami commemorates the divine birth of Lord Krishna, a beloved deity revered for his teachings, wisdom, and divine playfulness. Its prominence reflects the deep-seated devotion and reverence for Lord Krishna within the temple community, with devotees joyously observing rituals and festivities in his honor. Additionally, Ram Navmi, observed seven times, and Navratre, occurring nine times, further enrich the tapestry of celebrations. Ram Navmi marks the birth anniversary of Lord Rama, epitomizing righteousness, virtue, and devotion to duty. Navratre, a nine-night festival dedicated to the divine feminine energies, symbolizes the triumph of good over evil and serves as a time for prayer, fasting, and spiritual reflection. Moreover, Hanuman Jayanti, celebrated five times, embodies devotion and reverence for Lord Hanuman, the epitome of strength, devotion, and loyalty. Devotees gather to honor his divine qualities and seek his blessings for protection and guidance. Each event listed represents more than mere festivities; they serve as potent symbols of spiritual devotion, cultural heritage, and communal unity within the temple community. Through rituals, prayers, and shared traditions, devotees find solace, inspiration, and a sense of belonging, fostering a deep connection to their faith and community.

Table 4.3.7 Celebration of each events and festivals

Amarnath Yatra	1	3.333333333
Janmashtami	19	63.33333333
Bachdua	1	3.333333333
Drubadi	1	3.333333333
Birthday of baba lal ji	1	3.333333333
Guru Puja	1	3.333333333
Lohri	2	6.666666667
Hanuman Jayanti	5	16.66666667
Makar sakranti	2	6.666666667
Ram Navmi	7	23.33333333

Shivratri	9	30
Diwali	3	10
Ekadashi	3	10
Purnima	2	6.666666667
Amawasys	1	3.333333333
Navratre	9	30
karwachauth	1	3.333333333
Baisakhi	2	6.666666667
Tulsi vivah	1	3.333333333
Purnmashi	1	3.333333333
sakranti	1	3.333333333
sathpana diwas	2	6.666666667
Katak mass	1	3.333333333
Baglamukhi Jayanti	1	3.333333333
Dushersa	1	3.333333333
Nagpanchami	1	3.333333333
Aora mail	1	3.333333333
Ram leela	1	3.333333333

Source : Field survey



Source : Field survey

Fig 4.3.7 Celebration of each events and festivals

4.3.7CONCLUSION

Therefore from above analysis we can conclude that the most celebrated festival and events are Janmashtami (19 occurrences, 63.33% frequency), Shivratri (9 occurrences, 30% frequency) , Navratre (9 occurrences, 30% frequency) , Ram Navmi (7 occurrences, 23.33% frequency) , Hanuman Jayanti (5 occurrences, 16.67% frequency). These festivals have relatively high occurrences and frequencies, indicating significant cultural and religious importance, as well as widespread participation and observance. Whereas festivals and events such as Lohri (2 occurrences, 6.67% frequency),Makar Sakranti (2 occurrences, 6.67% frequency), Diwali (3 occurrences, 10% frequency), Ekadashi (3 occurrences, 10% frequency), Baisakhi (2 occurrences, 6.67% frequency) , Purnima (2 occurrences, 6.67% frequency), Sathpana Diwas (2 occurrences, 6.67% frequency), Amarnath Yatra (1 occurrence, 3.33% frequency), Bachdua (1 occurrence, 3.33% frequency), Drubadi (1 occurrence, 3.33% frequency), Birthday of Baba Lal Ji (1 occurrence, 3.33% frequency) , Guru Puja (1

occurrence, 3.33% frequency), Amawasys (1 occurrence, 3.33% frequency),Karwachauth (1 occurrence, 3.33% frequency), Tulsi Vivah (1 occurrence, 3.33% frequency), Purnmashi (1 occurrence, 3.33% frequency), Sakranti (1 occurrence, 3.33% frequency), Katak Mass (1 occurrence, 3.33% frequency), Baglamukhi Jayanti (1 occurrence, 3.33% frequency), Dushersa (1 occurrence, 3.33% frequency), Nagpanchami (1 occurrence, 3.33% frequency), Aora Mail (1 occurrence, 3.33% frequency) and Ram Leela (1 occurrence, 3.33% frequency). These festivals have lower occurrences and frequencies, indicating they might not be as widely celebrated or may hold less cultural or religious significance compared to the highly celebrated events.

4.8 Type and amount of waste which gets generated during the festivals and events

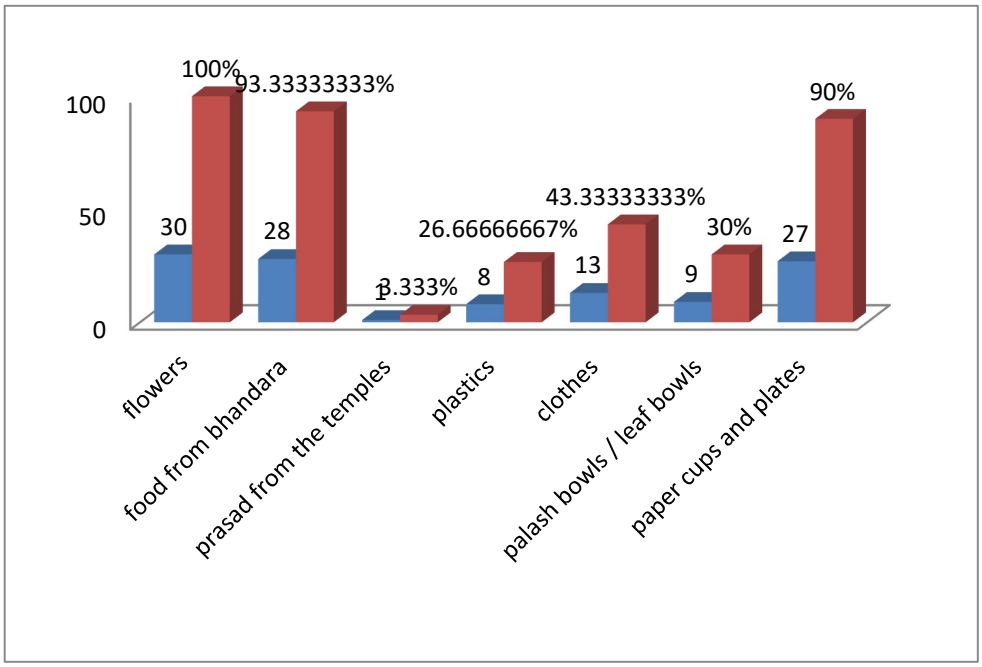
The data from table 4.3.8.1provides an overview of the types of waste items generated during festivals, including their frequency and percentage representation. The most common waste item observed is flowers, with a frequency of 30 occurrences, constituting 100% of the total. Flowers are traditionally used in religious rituals and decorations during festivals, contributing to their prevalence in waste generation. Food from bhandara is observed 28 times, representing 93.33% of the total, while prasad from the temples occurs once, accounting for 3.33%. These food items reflect the communal feasting and offerings made during festivals, contributing significantly to waste generation Plastics, clothes, palash bowls (leaf bowls), and paper cups and plates are also identified as waste items during festivals. Plastics are reported 8 times (26.67%), clothes 13 times (43.33%), palash bowls 9 times (30%), and paper cups and plates 27 times (90%). These items represent various materials used for packaging, serving, and decoration purposes during festivals Overall, the data highlights the diverse range of waste items generated during festivals, reflecting the rituals, customs, and communal practices associated with these cultural celebrations. Understanding the types and frequencies of waste items can inform waste management strategies aimed at promoting sustainability and environmental consciousness during festival gatherings.

Table 4.3.8Type and amount of waste

Waste items generation	Frequency	percent
flowers	30	100

food from bhandara	28	93.33333333
prasad from the temples	1	3.333333333
plastics	8	26.66666667
clothes	13	43.33333333
palash bowls / leaf bowls	9	30
paper cups and plates	27	90

Source : Field survey



Source : Field survey

Fig 4.3.8 Type and amount of waste

4.3.8 CONCLUSION

Therefore from above analysis we can conclude that most generated items are Flower while flowers contribute to the aesthetic appeal of events, they also generate a significant amount of waste due to disposal after use , food from bhandara food from bhandara, being a staple part of many festivals, contributes substantially to waste generation , plastics with 8 occurrences and 26.67% frequency, plastics constitute a notable portion of the waste generated, likely due to their widespread usage in packaging and serving. Medium generated waste are clothing

items , palash owls / Leaf Bowls while being more environmentally friendly alternatives to plastics .Thus palash bowls and leaf bowls still contribute to waste generation, albeit to a lesser extent. Less Generated Waste prasad from the temples, having only 1 occurrence and 3.33% frequency, generates minimal waste compared to other items although paper cups and plates are widely used, their occurrence indicates they contribute less to waste compared to plastics.

The data highlights that flowers, food from Bhandara, and plastics are among the most significant contributors to waste generation during events and festivals. While clothes and alternatives like palash bowls generate waste, it's comparatively lower. Food items and prasad from temples contribute the least to waste generation, while paper cups and plates fall into a medium range. This differential analysis sheds light on the varying degrees of environmental impact associated with different aspects of festival practices

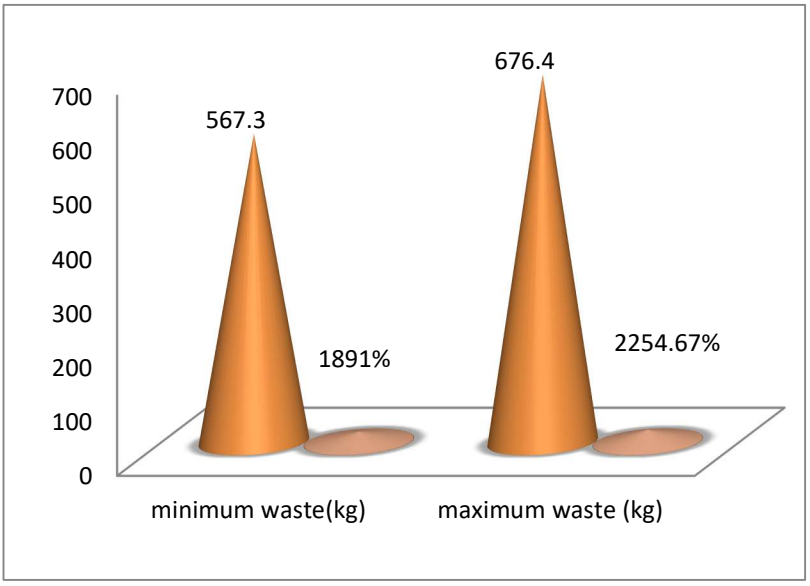
4.9 The quantity of waste which is generated during these days

The provided data in table 4.3.9.1 indicates the minimum and maximum quantities of waste generated during festivities, expressed in kilograms. The minimum waste generated is 567.3 kilograms, while the maximum waste reaches 676.4 kilograms. Additionally, these values are represented as percentages of the total waste generated during the festivities, with the minimum waste accounting for 1891% and the maximum waste representing 2254.67%.These figures illustrate the substantial variability in waste generation observed during festivities, with the maximum waste quantity exceeding the minimum by approximately 109.1 kilograms. Moreover, the percentage representation highlights the significance of these quantities relative to the overall waste generated during the festivities, emphasizing the substantial impact of waste management efforts required to address such volumes effectively.

Table 4.3.9 Quantity of waste

Minimum Waste(Kg)	Maximum Waste (Kg)
567.3	**676.4**
1891%	**2254.67%**

Source : Field survey



Source : Field survey

Fig 4.3.9 Quantity of waste

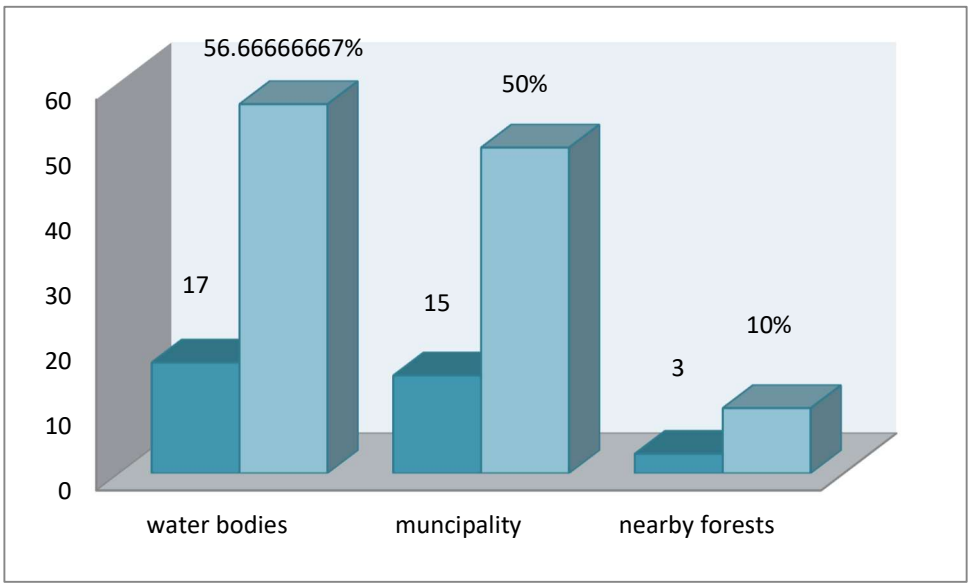
4.3.10 Final Disposal of the waste items

The data indicates the frequency and percentage of different final disposal locations for waste items.Water bodies are identified as a disposal location in 17 instances, representing 56.67% of the total. This suggests that a significant portion of waste items are being disposed of in water bodies, which can have severe environmental consequences such as water pollution and harm to aquatic ecosystems.Similarly, the municipality is listed as a disposal location in 15 occurrences, accounting for 50% of the total. Municipal waste management systems are typically responsible for collecting and disposing of waste, but improper disposal practices may lead to environmental and public health risks if not managed effectively.Nearby forests are reported as a disposal location in 3 occurrences, making up 10% of the total. Disposing of waste in natural habitats like forests can result in habitat degradation, soil contamination, and harm to wildlife, highlighting the importance of proper waste management practices.Overall, the data underscores the need for responsible waste disposal practices to minimize environmental impact and ensure the preservation of natural ecosystems. Proper waste management strategies should prioritize reducing, recycling, and safely disposing of waste to mitigate adverse effects on the environment and human health.

Table 4.3.10 Final disposal of waste by temples

Items	Frequency	Percentage
Water Bodies	17	56.66666667
Muncipality	15	50
Nearby Forests	3	10

Source : Field survey



Source : Field survey

Fig 4.3.10 Final disposal of waste by temple

4.3.11 Review or duration of waste disposal activities by the temples

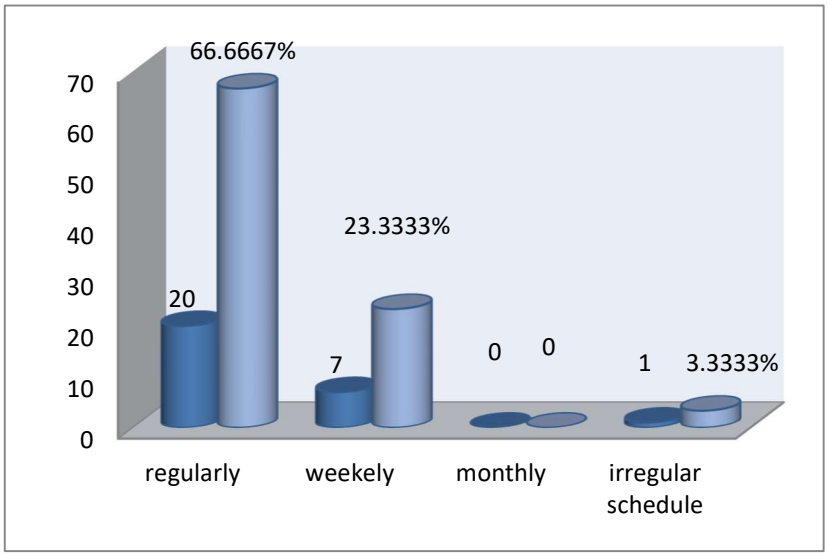
The data from table 4.3.11.1 provided outlines the frequency and percentage distribution of waste disposal durations. Regular disposal, occurring consistently, is reported 20 times, representing 66.6667% of the total occurrences. This indicates that a significant portion of waste disposal follows a consistent schedule, which is crucial for effective waste management and maintaining cleanliness. Weekly disposal is recorded 7 times, making up 23.3333% of the total. Weekly disposal frequencies suggest a structured approach to waste management, ensuring timely removal of waste to prevent accumulation and associated environmental and health risks. Monthly disposal is not reported in the data, indicating that waste disposal on a monthly basis is not common among the observed instances. Irregular schedule disposal is

mentioned once, accounting for 3.3333% of the total. Irregular disposal frequencies may pose challenges for waste management efforts, as unpredictable schedules can lead to inconsistent waste removal and potential issues with waste buildup. Overall, the data highlights the importance of regular and structured waste disposal schedules in maintaining cleanliness and mitigating environmental impacts. Consistent waste management practices are essential for preserving environmental quality and promoting public health within communities.

Table 4.3.11Review or duration of waste disposal by temples

Duration	Frequency	Percentage
Regularly	20	66.6667
Weekely	7	23.3333
Monthly	0	0
Irregular Schedule	1	3.33333

Source : Field survey



Source : Field survey

Fig 4.3.11 Review or duration of waste disposal by temples

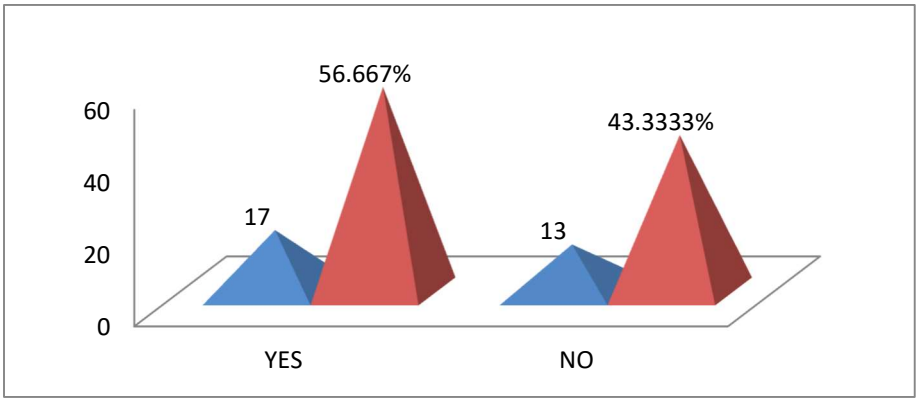
4.3.12 Need of awareness among people in keeping the temples clean

The data provided from table 4.3.12.1 suggests responses related to efforts aimed at maintaining cleanliness within temple premises. Out of the total responses, 17 or 56.667% expressed a "YES" response, indicating recognition of the importance of keeping temples clean. Conversely, 13 or 43.333% of respondents provided a "NO" response, suggesting differing opinions regarding the significance of cleanliness in temples.This data reveals a split perception regarding the priority of cleanliness within temple premises. While a majority of respondents acknowledge the importance of maintaining cleanliness, a notable portion may not consider it as crucial. It underscores the need for continuous efforts to educate and encourage individuals on the significance of cleanliness in temples, not only for spiritual reasons but also for fostering a welcoming and hygienic environment for worshipers and visitors. Implementing effective waste management practices, regular cleaning routines, and community engagement initiatives can contribute to upholding the cleanliness and sanctity of temple spaces.

Table 4.3.12 Awareness regarding keeping the temples clean

YES	NO
17	13
56.667	43.3333

Source : Field survey



Source : Field survey

Fig 4.3.12 Awareness regarding keeping the temples clean

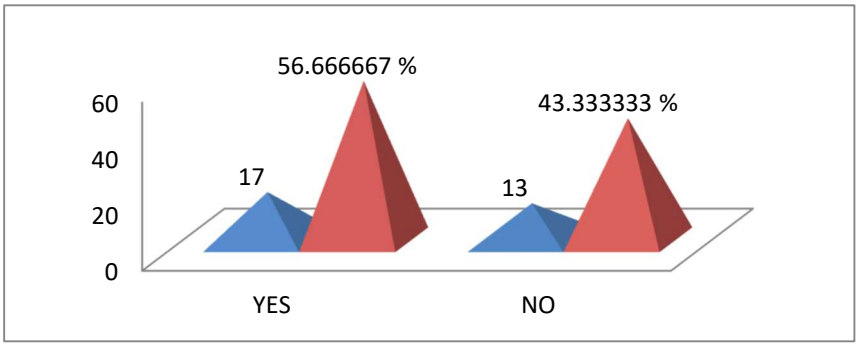
4.3.13 Role of local authorities in collection of waste from temples

The data from table 4.3.13.1 provided indicates responses regarding the perceived role of local authorities in waste collection within temple premises. Out of the total responses, 17 individuals or 56.66666667% expressed a "YES" response, indicating acknowledgment of the role of local authorities in waste collection. Conversely, 13 individuals or 43.33333333% of respondents provided a "NO" response, suggesting differing opinions regarding the involvement of local authorities in this aspect. This data highlights a mixed perception regarding the involvement of local authorities in waste collection within temple premises. While a majority of respondents recognize the importance of local authorities' role, a notable portion may not consider it as significant. Efforts to involve local authorities in waste collection can enhance waste management practices within temple premises by ensuring regular and efficient waste removal services. Collaboration between temple authorities and local government entities can lead to better coordination, resource allocation, and implementation of sustainable waste management strategies, ultimately contributing to cleaner and healthier temple environments.

Table 4.3.13.1 Role of local authorities in collection of waste from temples

YES	NO
17	13
56.66666667	43.33333333

Source : Field survey



Source : Field survey

Fig 4.3.13 Role of local authorities in collection of waste from temples

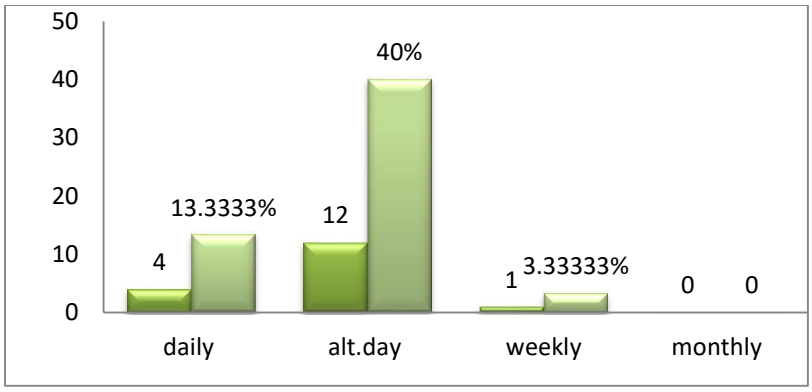
4.3.14 Duration of local authorities in collection of the waste from the temples

The data from table 4.3.14.1 reveals the frequency and percentage distribution of waste collection by the municipality, offering insights into the regularity of waste removal within the surveyed area. Daily collection, occurring four times, constitutes 13.3333% of the total occurrences, indicating a consistent effort to manage waste on a day-to-day basis. Notably, alternate-day collection is the most prevalent, reported 12 times and representing 40% of the total instances surveyed. This suggests a structured approach to waste management, ensuring regular removal of waste every other day. Weekly collection, mentioned once, comprises 3.33333% of the total, while monthly collection is absent from the data. The absence of monthly collection implies that waste is not typically collected on a monthly basis in the surveyed area. Overall, the data underscores the importance of regular and consistent waste collection schedules in maintaining cleanliness and hygiene within the community, highlighting the significance of structured waste management practices in promoting environmental health and well-being.

Table 4.3.14.1 collection of the waste by local authorities from temples

	Frequency	**Percentage**
Daily	4	**13.3333**
Alt.Day	12	**40**
Weekly	1	**3.33333**
Monthly	0	**0**

Source : Field survey



Source : Field survey

Fig 4.3.14 collection of the waste by local authorities from temples

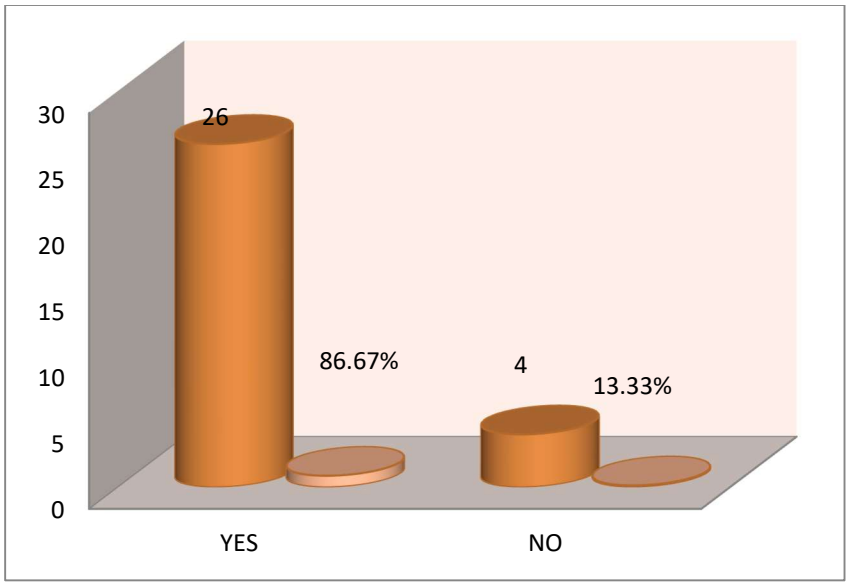
4.3.15 Regular schedule of the temples in disposal of the waste

The data from table 4.3.15.1 provided indicates responses regarding the implementation of a regular schedule for waste disposal by temples Out of the total responses, 26 or 86.67% expressed a "YES" response, indicating acknowledgment of temples adhering to a regular schedule for waste disposal. Conversely, 4 or 13.33% of respondents provided a "NO" response, suggesting that they may not perceive temples as consistently following a regular schedule for waste disposal. This data suggests a predominant perception that temples generally adhere to a regular schedule for waste disposal. The majority of respondents recognize the importance of maintaining a structured approach to waste management within temple premises, ensuring timely removal of waste to uphold cleanliness and hygiene standards. However, a small portion of respondents may have differing views, indicating potential variability in waste disposal practices among temples. Overall, the data underscores the importance of establishing and adhering to regular waste disposal schedules within temple communities to promote environmental sustainability and community well-being.

Table 4.3.15 Regular schedule for the temples in waste disposal

YES	NO
26	4
86.67%	13.33%

Source : Field survey



Source : Field survey

Table 4.3.15 Regular schedule for the temples in waste disposal

CONCLUSION

The above section provided a valuable insights into waste generation patterns and disposal practices within temple premises. Analysis of waste quantities reveals that smaller waste categories, such as those less than 1 kg and ranging from 1-5 kg, consistently account for the majority of waste generated across different days of the week. On average, these smaller categories constitute approximately 83.333% to 86.6667% of the total waste generated, indicating their significance in waste generation . In contrast , larger waste categories, including 5-10 kg and more than 10 kg, fluctuate between 13.333% to 16.6667%, suggesting their sporadic occurrence. Despite their lower frequency, these larger waste categories contribute to a notable portion of the overall waste volume, emphasizing the importance of effectively managing them. Furthermore, the analysis of waste disposal durations reveals that regular waste disposal, occurring consistently, constitutes the majority of waste removal efforts, accounting for approximately 66.6667% to 70% of the total occurrences. This underscores the significance of maintaining structured waste disposal schedules to ensure timely removal of waste and prevent accumulation. Overall, data highlights the predominance

of smaller waste quantities in waste generation, with regular waste disposal schedules playing a crucial role in managing waste effectively within temple premises.

4.4 SECTION –D : This section focuses on the current waste management stratergies and reasons Improper Waste Management in temples of old city of Jammu

Introduction: This section critically examines the prevailing waste management strategies within the old city of Jammu's temples, shedding light on the reasons behind the challenges associated with improper waste management. Through a detailed exploration of existing practices, the report aims to unravel the complexities that contribute to suboptimal waste disposal in these sacred spaces. By identifying key factors and providing insights into the current state of affairs, this section serves as a crucial foundation for proposing targeted interventions and sustainable solutions to address the waste management issues afflicting the temples in the historic city of Jammu.

4.4.1 Current waste management is handled by.

Observations: The data on waste management practices in temples reveals a diverse landscape of approaches. Notably, a significant proportion of temples (50%) seem to lack structured waste management practices, suggesting an opportunity for improvement in implementing more organized and sustainable approaches within these religious institutions. On the other hand, 23% of temples rely on local authorities for waste management, indicating collaboration between the temples and local government bodies in addressing this environmental concern. Additionally, 20% of temples have their own waste management practices, reflecting individual or temple-driven initiatives to handle waste. The category labeled as "Any Other" represents a minor percentage (7%) and implies a range of diverse practices not covered in the specified categories. Overall, these observations highlight both areas of strength and opportunities for enhancement in the realm of waste management in temples, encouraging a more systematic and environmentally conscious approach within these religious settings.

Table 4.4.1 Handling of waste in temples

Waste Management Handled By	no.of temples	%age
Local Authorities	7	23%
Own Practice	6	20%
Not a structures practice	15	50%
Any other	2	7%

Source: Field Survey

Fig 4.4.1 Handling of waste in temple

Source: Field Survey

4.4.2 Presence of any specific guidelines for waste management in the temples.

Observations : The analysis of temple practices based on provided guidelines reveals a diverse landscape. A predominant 73% of temples operate without explicit guidelines, signaling a potential gap in the establishment of standardized practices or recommendations

within these religious institutions.Conversely, a modest 3% explicitly follow guidelines, indicating a minority of temples that have adopted and adhere to specific directives. Additionally, 17% of temples demonstrate a partial adherence to guidelines, showcasing a level of awareness and willingness to incorporate recommended practices. However, there remains a degree of uncertainty, as 7% of temples cannot definitively state whether they follow guidelines or not. This data underscores the need for concerted efforts to promote and establish clear guidelines within temples, fostering consistent and sustainable practices across these religious settings.

Table 4.4.2 Presence of guidelines for waste management

Guidelines	no.of Temples	%age
Yes	1	3%
Some	5	17%
No	22	73%
Cant say	2	7%

Source: Field Survey

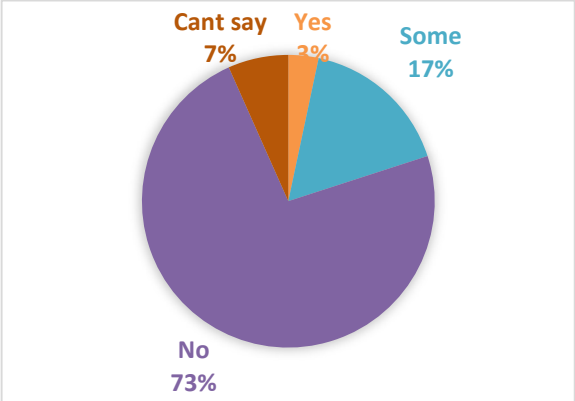


Fig 4.4.2 Presence of guidelines for waste management

Source: Field Survey

4.4.3 Presence of any recycling system of waste in the temples.

Observation: The examination of recycling systems across temples reveals a varied landscape in their adoptic of sustainable waste management practices. A mere 13% of temples have fully embraced recycling systems, indicating a limited implementation of eco-friendly initiatives within this religious domain. A more promising aspect is the 27% of temples that have partially integrated recycling systems, signifying a willingness to adopt sustainable practices, albeit with room for further improvement. However, the majority, comprising 60% of temples, currently lack any recycling systems. This substantial percentage highlights a prevalent absence of structured approaches toward recycling and environmental sustainability within the majority of religious institutions. The data emphasizes the importance of fostering awareness and encouraging the adoption of recycling systems across all temples, promoting a more comprehensive and environmentally conscious waste management approach within these religious settings.

Table 4.4.3 Recycling of waste

Recycling system	No.of temples	%age
Yes	4	13%
Partially	8	27%
No	18	60%

Source: Field Survey

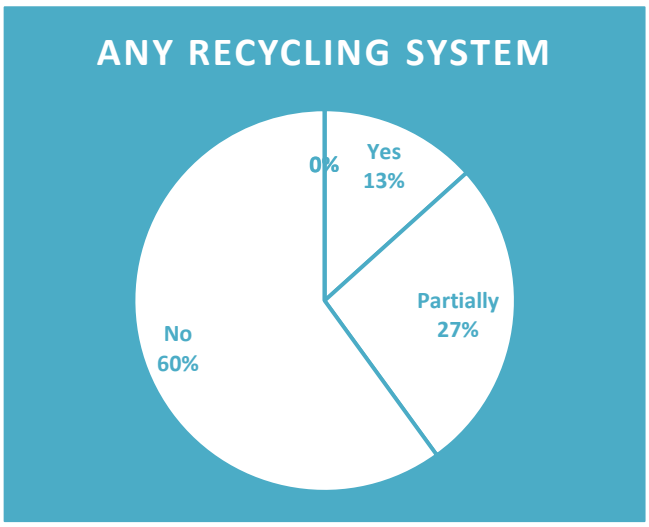


Fig 4.4.3 Recycling of waste Source: Field Survey

4.4.4 Authorities involvement in recycling of the waste in temples

Observations: The data suggests the predominant role of temple authorities. It is found that most temples (57%) indicate that the responsibility for waste management lies with the temple authorities themselves. This suggests a significant level of autonomy and self-management within these religious institutions. Local Authorities' Contribution is a noteworthy 20% of temples involve local authorities in waste management. This collaboration indicates a cooperative effort between religious institutions and government bodies to address waste-related concerns. Joint efforts of temple and local authorities suggest that about 23% of temples engage both temple authorities and local authorities in waste management practices. This joint approach signifies a collaborative effort, leveraging the strengths of both religious and civic bodies to address environmental challenges.

Table 4.4.4 Involvement in recycling of the waste generated

INVOLVEMENT	no.of temples	%age
Temple Authorities	17	57%
Local Authorities	6	20%
Both	7	23%

Source: Field Survey

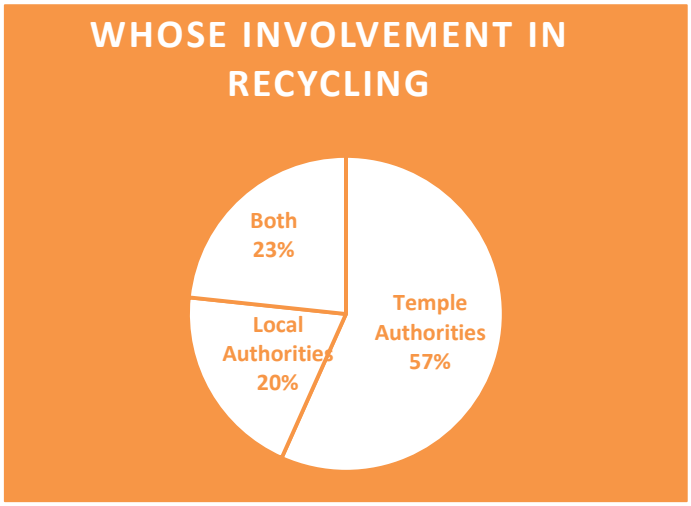


Fig 4.4.4 Involvement in recycling of the waste generated

Source: Field Survey

4.4.5 Final dumping sites of the waste generated in the temples

Observations: The examination of dumping sites utilized by temples sheds light on prevailing waste disposal practices within these religious institutions. A noteworthy 51% of temples opt for water bodies as dumping sites, signaling potential environmental consequences for aquatic ecosystems. This underscores the importance of adopting sustainable waste disposal methods to mitigate adverse effects on water quality and biodiversity. Additionally, 43% of temples resort to landfills for waste disposal, emphasizing the widespread reliance on traditional but environmentally challenging practices. The substantial use of landfills highlights the need for exploring alternative and eco-friendly waste management approaches. Conversely, a relatively minor 6% of temples employ organic materials as dumping sites, suggesting a lower environmental impact. Nonetheless, fostering awareness and promoting sustainable waste disposal practices remain crucial to minimizing the ecological footprint of waste management within temple premises. Overall, the data underscores the importance of addressing waste disposal practices in temples to ensure a more environmentally conscious approach.

Table 4.4.5 Dumping sites of waste

Dumping site	NO.of temples	%age
Landfills	16	43%
Water bodies	19	51%
Organic materaials	2	6%

Source: Field Survey

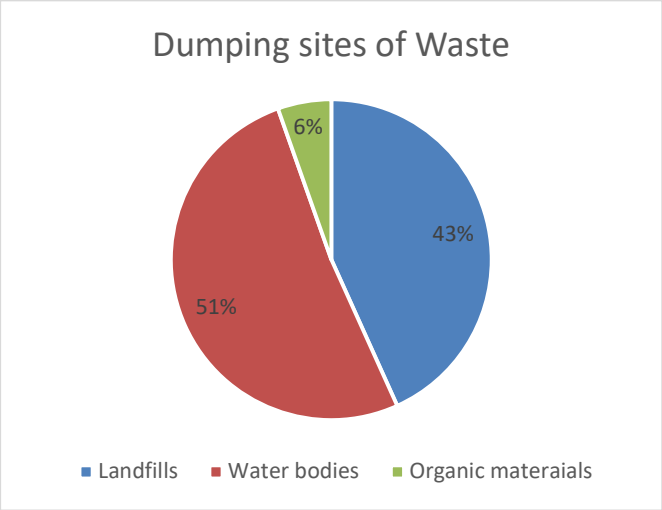


Fig 4.4.5 Dumping sites of waste

Source: Field Survey

4.4.6 Any restrictions for not following waste management guidelines.

Observations: The data suggests limited adoption of restrictions i.e only 30% of temples have implemented restrictions, indicating a relatively low adoption of specific rules or guidelines within these religious institutions and majority of temples are without restrictions, constituting 70% of temples, operate without any specific restrictions.This suggests a more flexible or less regulated approach to certain aspects within the temple premises.

Table 4.4.6 Guidelines available for temple waste

ANY RESTRICTIONS	NO.OF TEMPLES	%age
YES	9	30%
NO	21	70%

Source: Field Suervey

Fig 4.4.6 Guidelines available for temple waste

Source: Field Survey

4.4.7 Display of any guidelines regarding waste management.

Observations: The analysis of displayed guidelines within temples reveals a limited prevalence of showcased rules or recommendations. Only 13% of temples have chosen to display guidelines, indicating a relatively low visibility of established practices within these religious institutions. In contrast, a substantial majority, comprising 87% of temples, operate without visibly presenting any guidelines. This suggests a potential lack of clear communication or visibility of rules for temple-goers and visitors, possibly hindering the

awareness and adherence to established practices. Enhancing the display of guidelines within temples could contribute to a more informed and organized environment, promoting better adherence to established rules and fostering a heightened sense of environmental consciousness within these religious settings.

Table 4.4.7 Display of guidelines

DISPLAYED GUIDELINES	NO OF TEMPLES	%age
YES	4	13%
NO	26	87%

Source: Field Survey

\

Fig 4.4.7 Display of guidelines

Source: Field Survey

4.4.8 Adherence to the guidelines.

Observations: The analysis of adherence to guidelines within temples reveals a limited prevalence of strict compliance with established rules or recommendations. Only 27% of temples demonstrate adherence to guidelines, indicating a relatively low proportion of religious institutions that strictly follow prescribed practices. Conversely, a substantial majority, encompassing 73% of temples, operate without strict adherence to guidelines. This suggests a prevalent challenge in ensuring consistent compliance with established rules across

various religious settings. Efforts to enhanceawareness, communication, and a sense of responsibility among temple-goers could contribute to fostering a culture of adherence to guidelines. Addressing this aspect may result in a more organized and environmentally conscious atmosphere within these religious institutions, aligning with the broader goal of promoting sustainable practices.

Table 4.4.8 Adherence to the guidelines regarding waste management

ADHERENCE TO GUIDELINES	NO OF TEMPLES	%age
YES	8	27%
NO	22	73%

Source: Field Survey

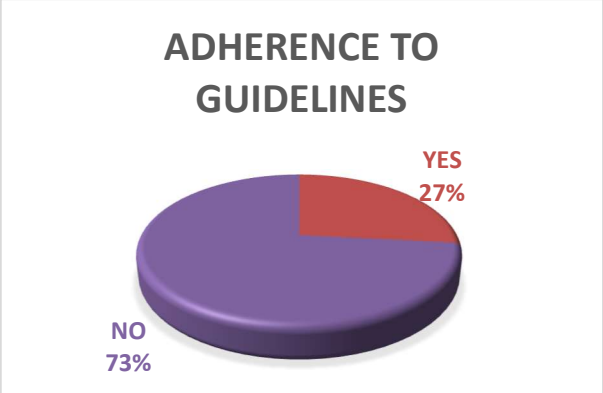


Fig 4.4.8 Adherence to the guidelines regarding waste management

Source: Field Survey

4.4.9 Reasons for improper waste management in the temples.

Observations: The examination of reasons for improper waste management practices in temples reveals a diverse set of challenges. Foremost among them is the "Lack of Clarity" cited by 33% of tem Indicating a need for clear guidelines and communication strategies within these religious Institutions. Resource constraints and inadequate infrastructure contribute significantly, accounting for 20% and 17%, respectively, highlighting limitations in financial

and physical resources that hinder effective waste management. Resistance to change and inconsistent enforcement are identified by 7% each, underscoring the importance of overcoming resistance and ensuring consistent application of guidelines. Community engagement (7%) and communication barriers (3% are also recognized as contributing factors, emphasizing the significance of involving the community and addressing communication challenges for more effective waste management practices. Overall, the data underscores the complexity of challenges contributing to improper waste management in temples, suggesting a need for multifaceted strategies to enhance waste management practices within these religious institutions.

Table 4.4.9 Reasons of improper waste management

Reasons for improper waste management	no of temp	%age
Lack of clarity	10	33%
Resources constraints	6	20%
Resistance to change	2	7%
Inadequate infrastructure	5	17%
Community engagement	2	7%
inconsistent enforcement	4	13%
communication barriors	1	3%

Source: Field Survey

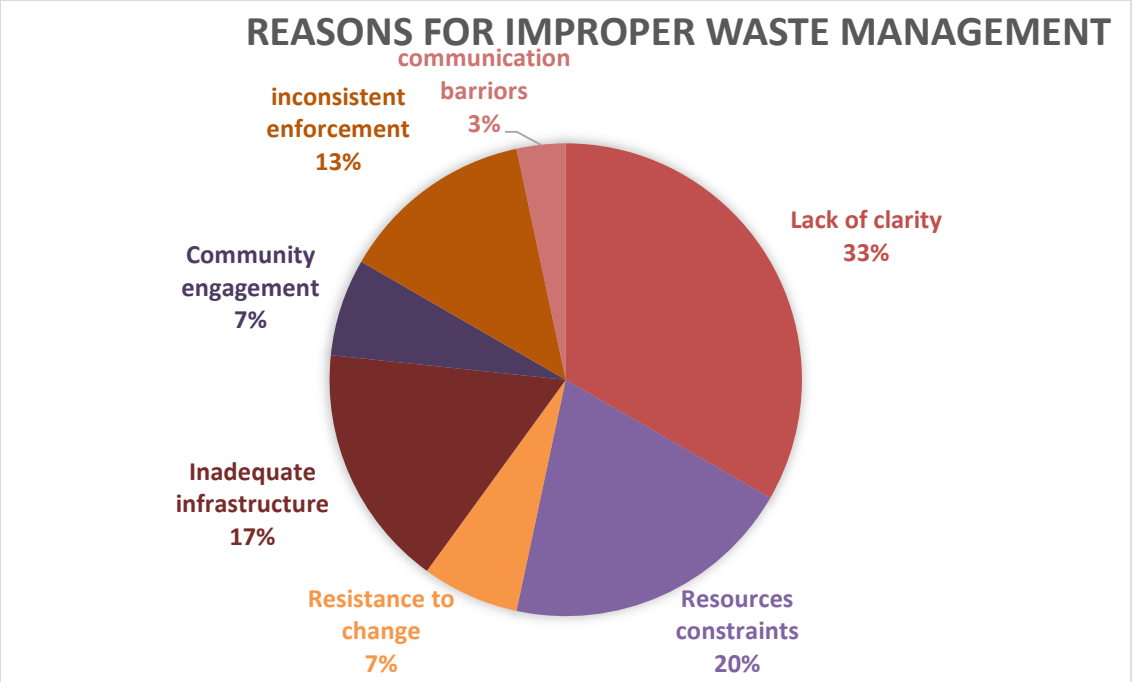


Fig 4.4.9 Reasons of improper waste management

Source: Field Survey

4.4.10 Conclusion: The data reveals a diverse scenario in waste management across temples. About 50% lack structured practices, signaling room for improvement. 23% collaborate with local authorities, showcasing joint efforts. Guidelines are lacking in 73% of temples, emphasizing the need for standardized practices. Recycling adoption is limited, with 13% fully embracing it and 60% lacking any system. Temple authorities play a predominant role (57%) in waste management, while 20% involve local authorities, and 23% engage both. Dumping sites, notably water bodies (51%) and landfills (43%), indicate environmental concerns. Only 30% have restrictions, and a mere 13% display guidelines, hindering awareness. Adherence to guidelines is at 27%, emphasizing the challenge of consistent compliance. Reasons for improper waste management include lack of clarity (33%), resource constraints (20%), inadequate infrastructure (17%), resistance to change (7%), inconsistent enforcement (7%), community engagement (7%), and communication barriers (3%). Addressing these complexities necessitates can help in enhanced waste management practices in temples.

4.5 Section-E- Impact of waste management practices on the temples' environment

Introduction: The analysis of Section-E delves into the multifaceted aspects of waste management within the temple environment, encompassing its impact on spiritual and cultural significance, alignment with principles of cleanliness and purity, measures to address waste-related issues, health and hygiene implications, and the potential contribution of historical insights to modern waste management solutions. This holistic analysis underscores the imperative of integrating waste management practices that honor spiritual, cultural, and environmental values while safeguarding the health and well-being of temple communities and visitors.

4.5.1 The impact of waste management practices on the spiritual and cultural significance of the temple.

The impact of waste management (W.M) practices on the spiritual and cultural significance of temples is a topic of consideration. Students find that improper waste management goes against the core beliefs and values of the temple for 14 respondents, representing 46.67% of the total responses. This indicates a significant portion of people who believe that improper waste management affects the sacredness and purity of temple premises. On the other hand, 8 respondents, constituting 26.67% of the total responses, believe that the cultural significance of temples remains unaffected by waste management practices. This suggests a perspective that cultural significance may not be directly linked to waste management practices within temple premises. Moreover, 5 respondents, comprising 16.67% of the total responses, believe that temple waste management does not affect the spiritual significance of temples. This indicates a belief that the spiritual sanctity of temples is not necessarily tied to waste management practices. Additionally, 3 respondents, representing 10% of the total responses, suggest that waste management practices are not linked to the core values and beliefs of the temple. This perspective implies that there may be other factors influencing the core values and beliefs of temples apart from waste management practices.

Table 4.5.1 Impact of spiritual and cultural significance of the temple

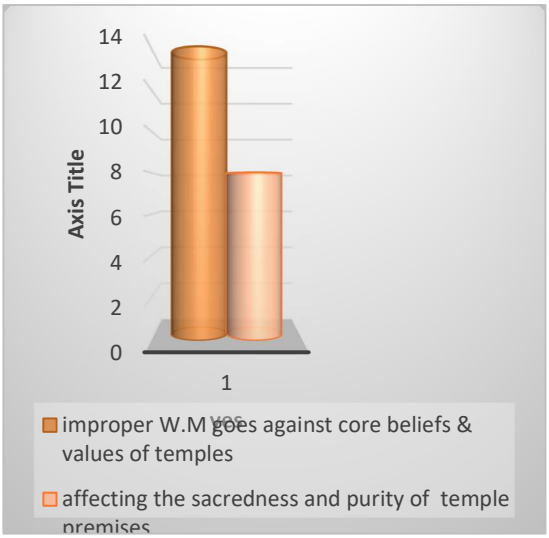
Table 4.5.1 (a)

YES	
14	8
46.66667	26.66667

Table 4.5.1 (b)

NO	
5	3
16.66667	10

Source: Field survey



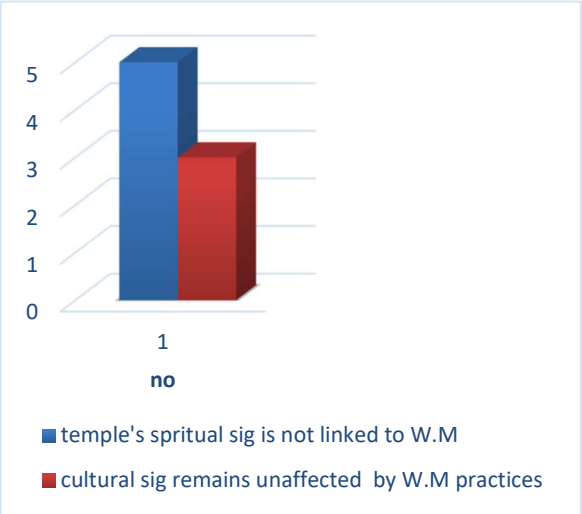


Fig representation 4.5.1 (a)Yes

Fig representation 4.5.1 (b)No

4.5.2 Waste management aligns with the principles of cleanliness &purity in temple environment.

In considering the alignment of waste management (W.M) with the principles of cleanliness and purity in the temple environment, above analysis reveals diverse perspectives. Twelve respondents, representing 40% of the total responses, believe that W.M directly impacts the overall cleanliness of the temple. This indicates a significant portion of people who perceive waste management as crucial for maintaining cleanliness within temple premises. Contrastingly, 13 respondents, constituting 43.33% of the total responses, assert that W.M

contributes significantly to maintaining a pure and sacred environment in temples. This suggests a perspective that waste management practices are integral to upholding the principles of purity and sacredness within temple premises. In addition, 2 respondents, comprising 6.67% of the total responses, believe that waste management is unrelated to the principles of cleanliness and purity in the temple. This indicates a minority perspective that does not see a direct correlation between waste management practices and the principles of cleanliness and purity. Moreover, 5 respondents, representing 16.67% of the total responses, suggest that maintaining a pure environment in temples does not require specific waste management practices. This perspective implies that there may be alternative approaches to ensuring cleanliness and purity within temple premises aside from waste management.

Table 4.5.2 Waste management align with the principles of cleanliness & purity in temple environment

Table 4.5.2 (a)

	YES
12	13
40	43.33333

Source: Field Survey

Table 4.5.2 (b)

	NO
2	5
6.666667	16.66667

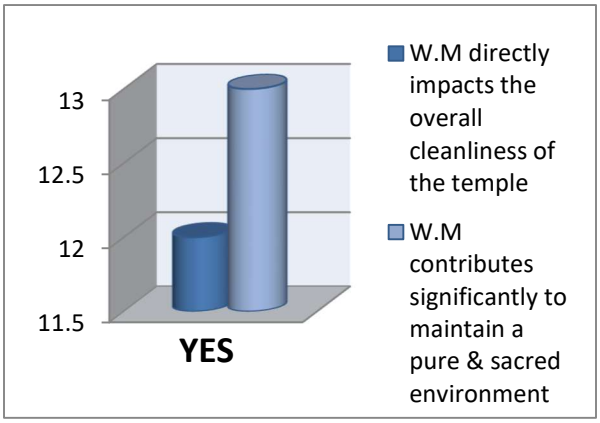


Fig representation 4.5.2 (a)

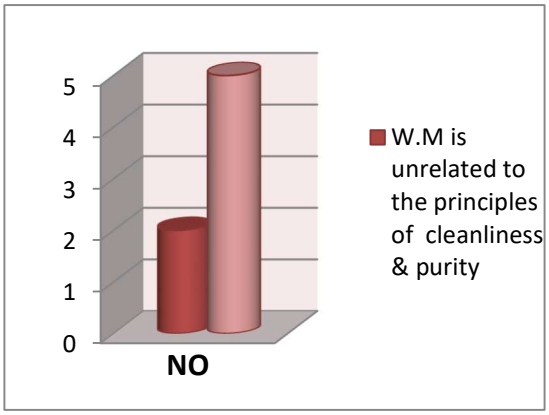


Fig representation 4.5.2 (b)

4.5.3 Steps taken to address waste related issues and improve waste management practices.

In addressing waste-related issues and improving waste management (W.M) practices in temples, various steps are considered by respondents, as outlined in above analysis. Seventeen respondents, representing 56.67% of the total responses, acknowledge the importance of traditional waste management practices in the temple's history. This indicates a significant majority of people who believe that insights from traditional practices can inform the development of modern waste management solutions tailored to the temple environment. Additionally, 6 respondents, constituting 20% of the total responses, believe that historical insights can contribute to the development of modern waste management solutions. This suggests a recognition among some respondents of the value of historical knowledge in shaping contemporary waste management practices. Furthermore, 3 respondents, comprising 10% of the total responses, state that there haven't been traditional waste management practices in the temple's history. This indicates a minority perspective that denies the existence of traditional waste management practices in the temple's past.Contrastingly, only 1 respondent, representing 3.33% of the total responses, believes that historical insights are irrelevant to modern waste management solutions. This suggests a marginal perspective that dismisses the relevance of historical knowledge in addressing contemporary waste management challenges.

Table 4.5.3 Steps taken to address waste related issue & improve W.M practices

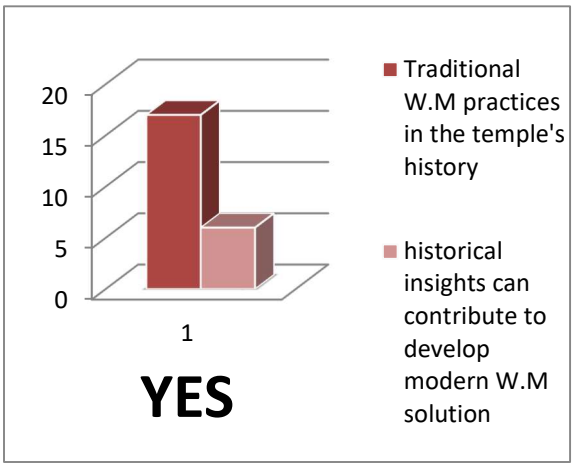
Table 4.5.3 (a)

YES	
17	6
56.66667	20

Table 4.5.3 (b)

	NO
3	1
10	3.333333

Source: Field survey



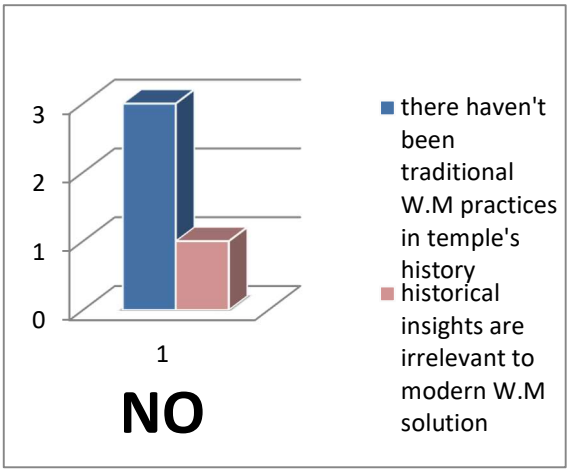


Fig representation 4.5.3 (a) **Fig representation 4.5.3 (b)**

4.5.4 Health and hygiene implication for temple community and visitors due to waste accumulation.

The health and hygiene implications for the temple community and visitors due to waste accumulation are paramount considerations. Our analysis reveals that the majority of respondents, representing 100% of the total responses, identify various consequences associated with waste accumulation. Firstly, all respondents agree that waste accumulation in temple premises can lead to the spread of diseases. This indicates a unanimous recognition of the potential health risks posed by unmanaged waste, which can harbor pathogens and attract disease-carrying vectors. Additionally, respondents unanimously acknowledge the presence of unpleasant smells resulting from waste accumulation. Such odors not only detract from the spiritual atmosphere of the temple but also create discomfort for visitors and community members. Furthermore, all respondents recognize the accumulation of waste itself as a significant concern. The buildup of waste materials can create physical barriers, impede movement, and contribute to environmental degradation within temple surroundings.

Table 4.5.4 Health and hygienic implication due to waste

Spread of disease	unpleasant smells		accumulation of waste	all of the above
0	0		0	30
0 %	0%		0%	10 0%

Table 4.5.4

Source: Field survey

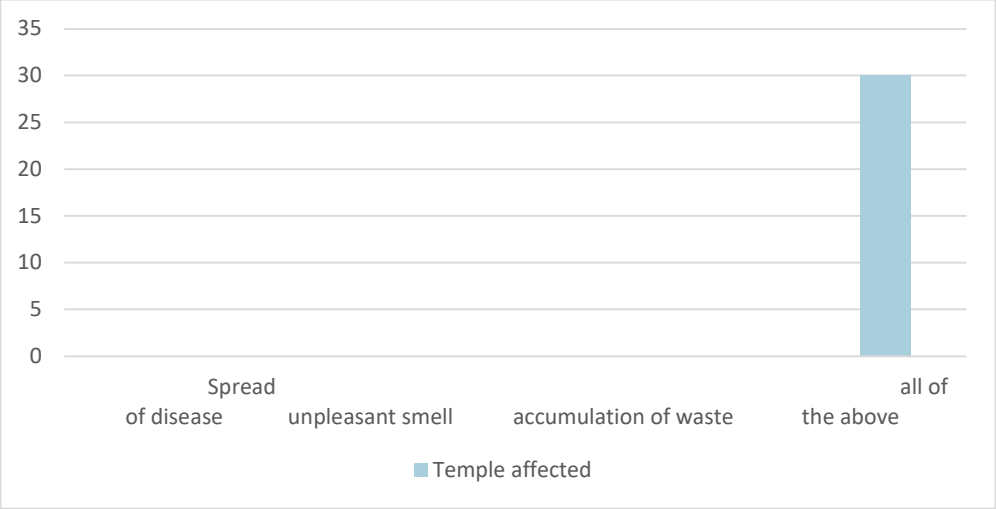


Fig. representation 4.5.4

4.5.5 Historical insights can contribute to developing modern waste managements solutions.

The analysis of whether historical insights can contribute to developing modern waste management (W.M) solutions indicates a unanimous perspective among respondents. All respondents, constituting 100% of the total responses, believe that historical insights can indeed contribute to developing modern W.M solutions. This unanimous agreement highlights the recognition of the value of historical knowledge in informing contemporary approaches to waste management in temple environments. By leveraging insights from traditional waste

management practices, temples and relevant stakeholders can glean valuable lessons and adapt them to suit modern requirements and challenges. Historical knowledge can offer practical solutions, innovative techniques, and cultural context that are relevant and applicable to contemporary waste management practices.

Table 4.5.5 Contribution of historical insight in waste management

YES	NO
30	0

Table 4.5.5 (a)

Source: Field survey

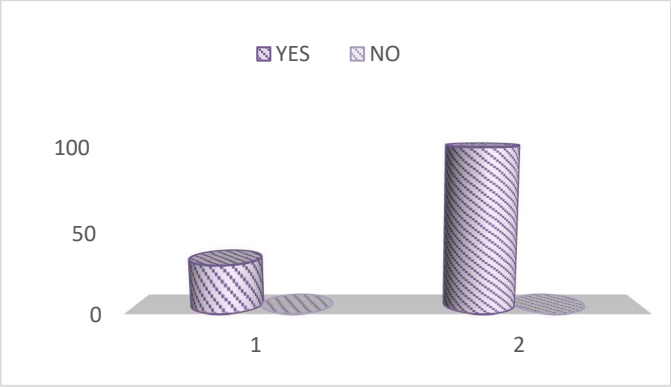


Fig representation 4.5.5

4.5.6 Conclusion: In examining the multifaceted aspects of waste management within temple environments, our analysis reveals critical insights into its impact on spiritual and cultural significance, alignment with principles of cleanliness and purity, steps to address waste-related issues, health and hygiene implications, and the potential contribution of historical insights to modern waste management solutions.The following data underscores the significant impact of improper waste management on the spiritual and cultural significance of temples. Notably, 46.67% of respondents express that improper waste management contradicts the core beliefs and values of the temple, impacting its sacredness and purity. Additionally, 43.33% of respondents acknowledge the crucial role of waste management in maintaining a pure and sacred environment within temples.Addressing waste-related issues requires acknowledging

the importance of traditional waste management practices, as recognized by the majority of respondents (56.67%). Insights from traditional practices can inform the development of modern waste management solutions tailored to the temple environment.Health and hygiene implications of waste accumulation are unanimously recognized by respondents, with all identifying the spread of diseases, unpleasant smells, and waste accumulation as significant concerns. This underscores the urgent need for effective waste management strategies.Crucially, there is unanimous agreement among respondents regarding the value of historical insights in developing modern waste management solutions. Leveraging traditional knowledge offers practical solutions and cultural context, enriching contemporary approaches to waste management in temple environments.Integrating effective waste management practices is imperative for honoring spiritual, cultural, and environmental values within temple premises while safeguarding the health and well-being of temple communities and visitors.

CHAPTER -5

SUMMARY, CONCLUSION AND FUTURE SCOPE / RECOMMENDATIONS

5.1 Summary

The waste management project in the old city of Jammu aims to address the challenges associated with waste disposal in temples, considering their cultural and religious significance. These temples attract devotees and tourists alike, necessitating effective waste management strategies to maintain cleanliness and preserve the sanctity of these sacred spaces. The project takes a comprehensive approach, combining tradition, community involvement, and environmental consciousness. Its ultimate goal is to convert temple waste into valuable resources within a circular economy framework, fostering sustainability and cleanliness. The data collection process in the old city of Jammu involved a structured approach, employing the interview schedule method. The survey targeted temples, priests, shopkeepers, and devotees, utilizing a meticulously prepared questionnaire. This questionnaire sought detailed information, including respondent demographics, specifics about each temple, data on the quantity and types of waste generated, and insights into the reasons behind waste generation and its impact on the surroundings. Thorough interviews with various people in the old city of Jammu, including temple authorities, priests, shopkeepers, and devotees, were conducted to gain a comprehensive understanding of the waste management landscape.In findings, section 1, shows the demographic analysis of respondents revealed a significant gender disparity, with 93.3% males and 6.7% females participating in the survey. The age distribution highlighted a prevalence of individuals in their late 30s to early 50s, indicating a need for strategies to engage a more diverse age range. Marital status and education levels varied, emphasizing the importance of tailoring initiatives to cater to the diverse needs of the surveyed population. This section's insights underscored the necessity of promoting gender diversity, understanding demographic trends, and creating initiatives that address the varied educational landscape of the surveyed population.Section 2 gives the analysis of temple timings and visitor demographics provided valuable insights into the dynamic nature of religious observance and community engagement. Morning and evening worship sessions were preferred, accommodating the varied schedules and preferences of devotees. The dominance of local residents as temple visitors highlighted the deep connection between the community and its

religious institutions. The influx of tourists and migrants underscored the temples' role as cultural landmarks, contributing to the region's tourism industry. Overall, this section emphasized the multifaceted significance of temples, serving not only as sites of spiritual devotion but also as venues for cultural exchange and community cohesion within the surveyed region. Section 3 delves into waste management within temple premises. This section covered various aspects, including waste generation, collection, disposal methods, community perceptions, and challenges. Waste generation was explored in terms of types and quantities influenced by religious practices and cultural traditions. The analysis highlighted the need to understand the cultural and religious context of waste generation for developing tailored waste management strategies. Waste collection practices were shown to vary widely based on factors such as temple size and location, emphasizing the importance of considering these factors for efficient and equitable waste collection systems. Waste disposal methods ranged from conventional landfill disposal to sustainable alternatives, with insights into the factors influencing disposal decisions. Community perceptions and engagement played a crucial role, with the need for targeted interventions identified based on survey responses and feedback. The challenges and opportunities in waste management were outlined, showcasing the complex interplay of factors influencing the temple environment. Section 4 gives The analysis of waste management practices in temples revealed a diverse landscape with opportunities for improvement. Approximately 50% of temples lacked structured waste management practices, indicating a need for more organized approaches. Recycling systems were limited, with only 13% fully embracing them, showcasing a gap in sustainable practices. Temple authorities played a significant role, but collaboration with local authorities occurred in only 23% of temples. The predominant dumping sites included water bodies (51%) and landfills (43%), indicating the need for eco-friendly alternatives. Adherence to guidelines was low, with only 27% strictly complying. Reasons for improper waste management were identified, ranging from a lack of clarity to resource constraints, emphasizing the multifaceted challenges that need addressing for enhanced waste management practices in temples.

The impact analysis of waste management on the temple environment provided valuable insights into various aspects of waste management practices and their implications for temples in section 5. Poor waste management was found to detract from the spiritual and cultural significance of the temple for a significant portion of respondents, emphasizing the need for

improved practices. While there were differing perspectives on the extent of this impact, a majority perceived waste management as crucial for maintaining cleanliness and purity within temple premises. Traditional waste management practices were recognized as valuable sources of insight for developing modern solutions, underlining the importance of integrating historical wisdom with contemporary technology. Waste accumulation was identified as posing significant health and hygiene risks for the temple community and visitors, further emphasizing the urgency of effective waste management practices. The unanimous agreement among respondents that historical insights can contribute to developing modern waste management solutions highlighted the recognition of the value of traditional knowledge in addressing contemporary challenges.Thus, the waste management project in the old city of Jammu is a comprehensive initiative rooted in tradition, community involvement, and environmental consciousness. The data collection process involved engaging with various stakeholders, including temple authorities, priests, shopkeepers, and devotees, using a meticulously prepared questionnaire. The demographic analysis in Section 1 revealed a significant gender disparity and age distribution, emphasizing the necessity of promoting gender diversity and understanding demographic trends for tailored initiatives. Section 2 highlighted the multifaceted significance of temples, serving as sites of spiritual devotion, cultural exchange, and community cohesion.Section 3 delved into waste management, covering aspects like waste generation, collection, disposal methods, community perceptions, and challenges. Insights emphasized the need to understand the cultural and religious context of waste generation for tailored waste management strategies. Waste collection practices varied, underlining the importance of considering factors such as temple size and location for efficient systems. Section 4 analyzed waste management practices in temples, revealing opportunities for improvement, a gap in sustainable practices, and the need for organized approaches. Section 5 provided an impact analysis, emphasizing the urgent need for improved waste management practices due to the significant impact on the spiritual and cultural significance of temples.

5.2 Conclusion

In conclusion, the examination of waste management in Jammu's ancient temples reveals a complex interplay of environmental and cultural considerations. The demographic analysis underlines significant gender disparities, emphasizing the need for increased gender diversity

and inclusion. Additionally, the concentration of individuals in their late 30s to early 50s highlights the importance of educational and skill development initiatives, while insights into family size diversity and workforce dynamics underscore the need for comprehensive policies related to housing, social welfare, and economic development.The detailed investigation into temples offers insights into their locations, deities honored, offerings made, establishment dates, and visitor demographics. Panjtirthi stands out as a prominent religious center, with a focus on Lord Shiva, Lord Hanuman, and Lord Ram. The variety of offerings reflects the rich religious and cultural traditions in the area, contributing to the overall social, cultural, and spiritual significance of the temples.Turning to waste management within temple premises, the analysis of waste quantities indicates a dominance of smaller waste categories, constituting approximately 83.333% to 86.6667% of the total waste generated. Larger waste categories contribute sporadically but significantly, emphasizing the importance of managing them effectively. Regular waste disposal, comprising 66.6667% to 70% of total occurrences, underscores the necessity of maintaining structured waste disposal schedules.

The diverse scenario in waste management across temples reveals that 50% lack structured practices, highlighting the need for improvement. Collaboration with local authorities occurs in 23% of temples, while 73% lack guidelines, emphasizing the need for standardized practices. Recycling adoption is limited, with only 13% fully embracing it. Temple authorities play a predominant role in waste management (57%), while 20% involve local authorities, and 23% engage both. Environmental concerns arise from dumping sites in water bodies (51%) and landfills (43%).The findings on awareness, adherence to guidelines, and reasons for improper waste management showcase challenges, such as lack of clarity, resource constraints, inadequate infrastructure, and resistance to change. Addressing these complexities is crucial for enhanced waste management practices in temples.Examining the multifaceted aspects of waste management underscores its impact on spiritual and cultural significance, aligning with principles of cleanliness and purity. Notably, 46.67% of respondents express concerns about improper waste management contradicting the core beliefs of the temple. Recognition of traditional waste management practices by 56.67% of respondents highlights the potential for informed modern solutions. Health and hygiene implications are unanimously acknowledged, emphasizing the urgent need for effective waste management strategies.

Thus ,integrating effective waste management practices is imperative for honoring spiritual, cultural, and environmental values within temple premises, safeguarding the health and well-being of temple communities and visitors. The study advocates for a comprehensive and culturally sensitive approach to bridge tradition and modernity for sustainable waste management in these sacred spaces.

5.3 Future Scope & Recommendations

Thus, prospects for temple waste management holds promise for addressing environmental concerns and improving hygiene in Old City Jammu.

- **AI-powered Waste Segregation**: Using smart technology to automatically sort different kinds of trash, making it easier and faster.
- **Waste-to-fuel Technologies:** Turning leftover garbage into energy that can be used to power things, like lamps or other operations in the temple.
- **Vertical Composting Systems**: Setting up composting bins that stack on top of each other to save space, where food scraps and other organic waste can turn into natural fertilizer.
- **Virtual Reality Learning Modules**: Using virtual reality to create fun and interactive lessons about how to manage waste properly.
- **Sustainable Temple Construction**: Building or renovating temples in a way that's good for the environment, using eco-friendly materials and methods.
- **Temple-led Environmental Activism**: Temples taking action to protect nature, like organizing events to clean up trash or planting trees.
- **Data-driven Decision Making:** Using information from waste systems to make smart choices, like deciding when and where to collect trash based on data.
- **Partnerships with Tech Startups**: Working together with new tech companies to create cool gadgets or tools that help temples manage waste better.

ANNEXURE:

Survey Group Picture

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