**Acknowledgment**

I am deeply grateful to all those who helped me in the successful completion of my project “City Garbage Survey – Gurdaspur.” This project gave me the opportunity to learn about the importance of cleanliness, waste management, and civic responsibility in maintaining a healthy environment. It also helped me understand how citizens and government work together to keep a city clean and sustainable.

First and foremost, I would like to express my sincere gratitude to Dr. Satbir Singh, my subject teacher for Environmental Science, for their constant guidance, valuable suggestions, and encouragement throughout the preparation of this project. Their expert advice, motivation, and continuous support inspired me to research and complete my work successfully.

I also wish to thank our college management for providing a platform where we can explore social and environmental issues through such meaningful projects. Their encouragement towards practical learning and awareness-based activities has helped me gain a better understanding of real-life challenges faced by society.

My heartfelt gratitude goes to my friends and classmates who supported me during data collection, photography, and report preparation. Their help in visiting different areas and discussing ideas made this project more detailed and informative. Teamwork and collaboration played a major role in completing this project smoothly.

Lastly, I am deeply thankful to my parents for their constant motivation, support, and understanding. They encouraged me at every step and helped me stay focused and determined to complete this work sincerely. Their values of cleanliness and responsibility towards society inspired me to choose this project topic.

This project has been a great learning experience for me. It helped me realize that waste management is not only the duty of the government but also the responsibility of every citizen. Small efforts like proper garbage disposal, segregation of waste, and participation in cleanliness drives can make a big difference in the development of our city. Through this project, I have developed a deeper sense of environmental awareness and civic duty.

Once again, I sincerely thank everyone who contributed directly or indirectly to the successful completion of this project on City Garbage Survey – Gurdaspur.

**Certificate**

This is to certify that the mini project entitled **“City Garbage Survey”** has been carried out by **Kirti** (roll no: 17032456767) under the supervision of **Dr. Satbir Singh, Department of Computer Science and Engineering, Guru Nanak Dev University,** as a part of the partial fulfillment of the requirements for the degree of Bachelor of Technology (Computer Science and Engineering), Semester 3.

**SUPERVISOR:** DR. Satbir Singh

**SIGNATURE OF STUDENT**  
Kirti (17032456767)

**DATE:**

This is certifying that the above statement made by candidate is correct to the best of my knowledge.

**ABSTRACT**

The cleanliness and hygiene of a city play a crucial role in determining the quality of life of its residents. With the increasing rate of urbanization and population growth, the problem of garbage disposal and waste management has become one of the most serious environmental challenges in modern times. The present project titled “City Garbage Survey – Gurdaspur” aims to study the existing garbage collection and disposal system of Gurdaspur city, analyze its effectiveness, and suggest possible improvements for a cleaner and healthier environment.

The main objective of this project is to understand how waste is generated, collected, segregated, and disposed of within different parts of Gurdaspur. The study focuses on identifying the types of waste commonly found in residential, commercial, and public areas — such as household waste, plastic waste, and organic waste — and observing the methods adopted by the Municipal Council for their management. The survey also examines the availability of dustbins, the frequency of garbage collection, and the level of awareness among the people regarding cleanliness and waste segregation.

To achieve these objectives, a field survey was conducted in different parts of the city including Hanuman Chowk, Civil Lines, Improvement Trust, Jail Road, Behrampur Road, etc. Data was collected through direct observation, photography, and short interviews with residents, shopkeepers, and sanitation workers. The findings were later analyzed using tables and charts to highlight the condition of cleanliness in each area. Through these observations, it was found that while some areas are regularly cleaned and well-maintained, others still face issues such as irregular waste collection, open dumping, and lack of dustbins.

The survey revealed that the Municipal Council of Gurdaspur plays a vital role in maintaining city hygiene through its waste collection vehicles and cleaning staff. However, the main challenges identified include the absence of proper segregation at the household level, insufficient awareness among people, and limited infrastructure for recycling and composting. In many areas, garbage is thrown on open plots or roadsides, which not only spoils the beauty of the city but also poses health risks due to the spread of flies and foul odors.

This project also emphasizes that effective waste management is not only the responsibility of municipal authorities but also of every citizen. The success of cleanliness programs like Swachh Bharat Abhiyan depends on active public participation, regular monitoring, and responsible behavior. People must be encouraged to use separate bins for dry and wet waste, avoid littering in public areas, and cooperate with municipal workers during waste collection.

The study concludes that Gurdaspur has made noticeable progress in maintaining cleanliness, yet there is still a need for improvement in areas such as waste segregation, awareness, and infrastructure. The suggestions include introducing proper segregation at source, establishing small composting plants, banning single-use plastics, and conducting educational campaigns to promote civic responsibility. With better coordination between the government and citizens, Gurdaspur can become a model city for sustainable waste management in Punjab.

In short, this project highlights the current situation of garbage disposal in Gurdaspur and presents practical measures to make the city cleaner and greener. It reflects that cleanliness is not just a duty but a habit that every individual should practice for the betterment of society and

**Introduction**

Cleanliness and sanitation are essential elements of a healthy society. The way a city manages its waste reflects its level of development, civic sense, and environmental responsibility. In today’s era of rapid urbanization, one of the biggest challenges faced by cities across India is the proper collection, segregation, and disposal of garbage. Improper waste management not only pollutes the environment but also affects public health, water bodies, and the overall beauty of the city.

The project titled “City Garbage Survey – Gurdaspur” has been undertaken to study the current condition of waste management in Gurdaspur city, identify the problems related to garbage collection and disposal, and suggest possible improvements for a cleaner and sustainable environment.

**Background of the Study:**

Gurdaspur is an important district headquarters located in the northern part of Punjab. It is known for its historical importance, educational institutions, and growing population. Over the past few years, the city has witnessed rapid growth in population, urban expansion, and commercial development. With this growth comes an increase in the generation of solid waste from households, markets, restaurants, hospitals, and schools. Managing this growing quantity of garbage has become a significant challenge for the Municipal Council Gurdaspur.

Like many Indian cities, Gurdaspur faces common issues such as irregular garbage collection, open dumping of waste, lack of public awareness, and insufficient segregation of dry and wet waste. Although several steps have been taken under government schemes such as the Swachh Bharat Abhiyan, maintaining consistent cleanliness in every part of the city still remains difficult. This project aims to explore how efficiently the environment.

**Objective of the survey**

The main purpose of conducting the City Garbage Survey in Gurdaspur is to study and analyze the current condition of waste management practices in the city. With the growing population, urbanization, and changing lifestyle patterns, waste generation has increased rapidly, creating serious environmental and health-related challenges. The survey has been designed to understand how garbage is collected, segregated, and disposed of in different parts of Gurdaspur, and to suggest ways for improvement.

The specific objectives of the survey are as follows:

1. To study the existing garbage collection system –

To observe how regularly garbage is collected from residential and commercial areas, and to analyze the efficiency of the Municipal Council’s collection vehicles and staff.

2. To identify major sources and types of waste –

To find out the common types of waste generated in households, shops, markets, and public areas, such as plastic waste, biodegradable waste, and non-biodegradable materials.

3. To evaluate the condition of cleanliness in different parts of the city –

To compare how well-maintained various localities are, including main roads, marketplaces, residential colonies, and public spaces like parks and bus stands.

4. To assess public awareness regarding waste management –

To understand how aware and responsible people are about waste segregation, cleanliness drives, and the use of separate bins for wet and dry waste.

5. To examine the role of the Municipal Council –

To analyze the working methods, challenges, and limitations faced by the local authorities in maintaining proper cleanliness across the city.

6. To identify problems in the current system –

To note down key issues such as open dumping, lack of dustbins, irregular collection, and poor segregation of waste at the source.

7. To suggest practical solutions for improvement –

To provide simple and effective recommendations like installing more bins, conducting awareness campaigns, promoting recycling, and introducing composting systems for organic waste.

8. To promote public participation in cleanliness drives –

To motivate local residents, shopkeepers, students, and youth groups to actively take part in keeping their surroundings clean and green.

Through these objectives, the survey aims to present a complete picture of the current garbage disposal system in Gurdaspur and highlight both its strengths and weaknesses. The study will help in identifying the steps that can make the city cleaner, healthier, and more environmentally friendly.

The ultimate goal of this project is to encourage responsible waste management practices and create awareness among citizens that maintaining cleanliness is not just the duty of municipal authorities but a shared responsibility of everyone living in the city.