# **CHAPTER 1**

## INTRODUCTION

Waste management is a critical aspect of urban development, and with the growing population and urbanization, effective waste management strategies are essential to address environmental concerns. In recent years, various community-driven initiatives have emerged to combat the challenges posed by increasing waste generation. One such initiative is the Harithakarma Sena, a grassroots organization committed to promoting environmental sustainability through community engagement and waste management.

Harithakarma Sena, which translates to "Green Action Army," operates with the mission of creating a cleaner and greener environment by actively involving local communities in waste management practices. This study aims to assess the effectiveness of Harithakarma Sena in waste management, focusing on its strategies, community involvement, and overall impact on waste reduction and environmental conservation.

Kerala has taken a great leap towards achieving the goal of a zero-waste state by adopting a digital solution to waste management. This is in keeping with their efforts to make waste management more efficient which includes enhancing the efficiency of door-to-door collection service through Haritha Karma Sena (Green Task Force) and allied services.

Haritha Keralam Mission, along with the Suchitwa Mission, last year launched a smart garbage monitoring system named Haritha Mithram Smart Garbage Monitoring System App. The App helps to streamline the activities of Haritha Karma Sena and its waste management interventions through time-to-time monitoring of various functional aspects covering the volume of generation from each waste source, its collection, transportation, and various other enormous processes that follow.

Under the Nava Keralam Karma Padhathi programme launched by the state government, almost all the Local Self Government Departments (LSGDs) have been integrated with a seamless chain that connects door-to-door waste collection by the Haritha Karma Sena, maintaining the mini material collection centres (MCC), material

collection centres (MCF), resource recovery facilities (RRF), domestic and institutional level bio-waste, disposal of material, and the installation and operation of organic waste management systems at household and institutional levels. The activities under this network system are monitored from ward level to state level through this unified online platform called the Haritha Mithram App.

## 1.2 SIGNIFICANCE OF THE STUDY

The new challenge of the world, that is managing the waste. In Keralam, the Kudumbashree Mission – Haritha Karma Sena - will work togther with Haritha Keralam Mission, Suchitwa Mission and Clean Kerala Company for a garbage-free state. The power to select Haritha Karma Sena are entrusted with the local bodies. Haritha Karma Senas are working with the objective of ensuring employment and income through the collection and treatment of waste materials, thereby finding a solution to the waste problem faced by Kerala to some extent. The importance of waste management in Kerala cannot be overstated. With a population of over 33 million people and growing urbanization, the amount of waste generated in the state has increased dramatically. Poor waste management practices can lead to environmental degradation, health hazards, and even economic losses.

#### 1.3 STATEMENT OF THE PROBLEM

The problem statement revolves around the effective management of solid waste, particularly in the context of the Haritha Karma Sena, an environmental initiative. This involves addressing issues such as waste collection, segregation, recycling, and disposal, while also considering the role and effectiveness of the Haritha Karma Sena in implementing sustainable waste management practices. Key aspects may include infrastructure, community engagement, policy support, and the integration of innovative technologies for efficient waste management.

#### 1.4 OBJECTIVES OF THE STUDY

- To evaluate the effectiveness of Harithakarma Sena
- To access the socio economic status of harithakarma sena workers

 Suggesting recommendations for improving the efficiency and sustainability of solid waste management practices facilitated by Harithakarma Sena

## 1.5 SCOPE OF THE STUDY

The scope of the study involves examining various aspects of solid waste management, particularly within the context of the Harithakarma Sena initiative. This could include analyzing methods for waste collection, segregation, recycling, and disposal implemented by the Harithakarma Sena, as well as assessing their effectiveness, challenges faced, and potential for scalability or improvement. Additionally, the scope may encompass exploring the socio-economic and environmental impacts of the initiative, comparing it with other solid waste management strategies, and identifying opportunities for collaboration or further research.

#### 1.6 RESEARCH METHODOLOGY

This study will employ a mixed-methods approach, combining quantitative data collection through surveys and waste audits with qualitative methods such as interviews and focus group discussions. The research will be conducted in selected urban areas where Harithakarma Sena is actively involved in waste management activities.

## 1.6.1 Research design

According to Burns and Grove research design is defined as "a blue print for conducting a study with maximum control over factors that may interfere with the validity of the findings".

The research design is probability research design and is descriptive in nature.

#### 1.6.2 Area Of The Study

The study is conducted at Kannur district.

## 1.6.3 Sample Size

The study was conduct a sample of 35 respondents

## 1.6.4 Sampling Technique

In this project probability sampling is used and simple random sampling is chosen from probability sampling. Simple random sampling from a finite population refers to that method of sample selection, which gives each sample combination in equal probability of being picked up and each item in the entire population to have an equal chance of being included in the sample.

#### 1.6.5 Sources of Data

## • Primary data

Primary data was collected from Kannur district by distribution of questionnaire.

## • Secondary data

Secondary data was collected through various mediums such as web portals, reference books relating to the subject.

## 1.6.6 Tools for data analysis

Interview schedule was used for collection the primary data. The collected data was analysed by using percentage method. Diagrams and tables were also used to present the data where ever necessary.

## 1.7 LIMITATIONS OF THE STUDY

- The study was conducted within a very short period of time so detailed study could not be made.
- Some of the respondents were not cooperative
- Study is based on limited samples so conclusion derived from this study cannot be generalized.

## 1.8 CHAPTER SCHEME

The study has been arranged into 5 chapters.

- The first chapter deals with introduction, statement of the problem, objectives, scope, research methodology and limitations of the study.
- The second chapter deals with Review of literature
- The third chapter deals with theoretical frame work.
- The Fourth chapter includes analysis and interpretation of collected data.
- Fifth chapter deals with summary, findings, suggestions and conclusion of the study.