A STUDY ON THE SOCIO-ECONOMIC PROFILE OF HARITH KARMA SENA WORKERS WITH SPECIAL REFERENCE TO CHERANALLOOR PANCHAYAT

Project submitted to

ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM

Affiliated to

MAHATMA GANDHI UNIVERSITY

IN PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR THE AWARD OF THE DEGREE OF

BACHELOR OF ARTS IN ECONOMICS



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CERTIFICATE

This is to certify that the project titled "A STUDY ON THE SOCIO-ECONOMIC PROFILE OF HARITH KARMA SENA WORKERS WITH SPECIAL REFERENCE TO CHERANALLOOR PANCHAYAT" submitted in partial fulfilment of the requirement for B. A Degree in Economics to St Teresa's College (Autonomous) (Affiliated to Mahatma Gandhi University, Kottayam) is a bonafide record of the work done by the project group under my supervision and guidance.

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Guide and supervisor

Ms. Anju George

DECLARATION

We hereby declare that the project titled "A STUDY ON THE SOCIO-ECONOMIC PROFILE OF HARITH KARMA SENA WORKERS WITH SPECIAL REFERENCE TO CHERANALLOOR PANCHAYAT" submitted by us for the B A Degree in Economics is our original work.

Signature of the supervisor

Ms. Anju George

Signature of the candidates

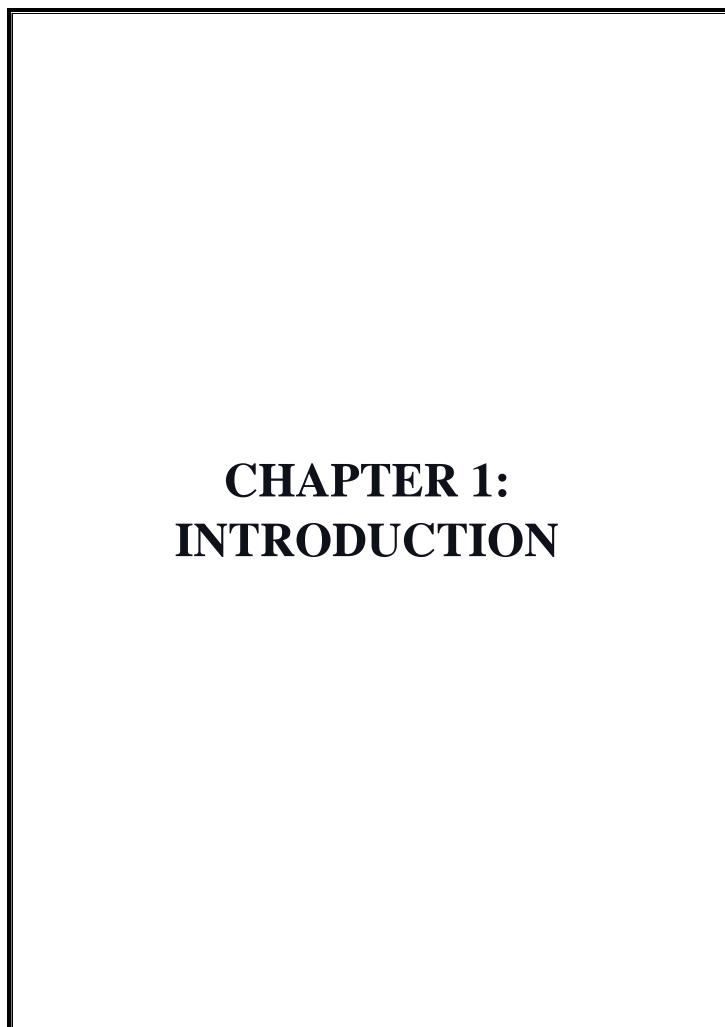
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1.1 INTRODUCTION

Waste management is one of the leading issues that the world is facing today. Globally, data reveals a massive dump of 2.12 billion tons of waste on the planet. This is a highly alarming rate that needs to be addressed because mismanaged waste and waste dumping take the lives of about a million people worldwide.

Waste management is important for several reasons:

- a. Environmental protection: Proper waste management helps to protect the environment from pollution and degradation. Improper disposal of waste can contaminate air, water, and soil, causing serious health and environmental hazards.
- b. Resource conservation: Waste management plays a crucial role in conserving natural resources by reducing the need for new raw materials. Recycling and reusing waste materials, such as paper, plastic, and metal, can save energy, water, and other resources.
- c. Public health: Poor waste management can pose significant health risks, particularly in developing countries. Inadequate disposal of medical waste, for instance, can lead to the spread of infectious diseases.
- d. Economic benefits: Proper waste management can also create economic benefits by generating revenue from recycling and reducing costs associated with waste disposal.
- e. Compliance with regulations: Waste management is often regulated by local, state, and federal laws. Proper waste management practices can help individuals and businesses avoid legal penalties and fines.

Overall, waste management is crucial for maintaining a sustainable environment and protecting public health. It is important for individuals, businesses, and governments to take responsibility for their waste and ensure that it is disposed of properly.

The scenario in India is also disheartening. With a population of 140.76 crores, India accumulates solid waste of 62 million tonnes per year and 60 major cities in

India produces about 3500 tonnes of plastic, out of which Delhi, Hyderabad, Mumbai, Kolkata, Chennai, and Bangalore are the major ones responsible. Overpopulation, urbanisation, poor waste management techniques and lack of public bins add to the problem. Proper management of waste by appropriate monitoring and segregation of waste is a solution to this problem. In the case of Kerala, an estimated 11,499 tonnes of solid waste are produced daily. Kerala has taken up a model of decentralised waste management to the panchayat level for proper and

efficient waste management. Thus, the government has assigned the Haritha Kerala Mission to take up the waste management initiative. Haritha Kerala Mission initiated the initiative to form Haritha Karma Sena to collect biodegradable and non-biodegradable wastes from households. Haritha Karma sena is a community-based organization in Kerala, India, that plays a significant role in waste management in the state. The organization was established by the Government of Kerala to promote the concept of waste segregation at source, composting, and recycling of waste. It is a trained team of entrepreneurs recruited to provide technical assistance and solutions on waste management projects. It is responsible for waste collection, transportation, processing, disposal and management in collaboration with respective LSGIs. As per the plan, a team of at least two workers will visit about 250 households in a ward. In a ward, sufficient task force members will be positioned with one Green Supervisor (a graduate able to operate computers and generate reports) for managing a team of 5-6 members covering 15 wards. Thus, in a Grama Panchayat having 15 Wards, the total manpower will be 31. A collection fee fixed by the LSGI is charged for the services rendered by the Haritha Karma Sena. The timely collection of fees will be the responsibility of the Green Supervisor.

Further, Haritha Sahaya Sthapanams (Technical Support Agency), the accredited agencies of Haritha Keralam Mission, have been deployed in a cluster format to provide technical assistance to the Haritha Karma Sena workers. Corporates, NGOs and Community organisations with prior experience and technical know-how in waste management are eligible to be selected as Haritha Sahaya Sthapanam. There are about 20000 Haritha Karma Sena workers in Kerala, also known as the green army of Kudumbasree. As per the Government order, the existing Kudumbasree or self-help groups can be considered Haritha Karma Senas upon approval from the concerned LSGIs. Municipalities, Grama Panchayats and Block Panchayats in the district without a similar mechanism can outsource such services from eligible agencies (local entrepreneurs or NGOs) to function as Haritha Karma Senas. Although efficiently functioning local Kudumbasree units have been given priority in matters of waste collection, in the absence of such units, the LSGIs can hire the services of NGOs or entrepreneurs. The Haritha Karma Sena operates in an enterprise model by collecting user fees for services, recyclables sales, inoculum and services of composting devices.

The essential duties performed by the Haritha Karma Sena include efficient dissemination of awareness regarding the importance of proper waste management, estimation of waste generated, provision of proper instructions and guidance to households and institutions regarding the management of composting devices and ensuring availability of raw materials

for source level composting (inoculum) in households/institutions. The collection of nonbiodegradables is conducted on a calendar basis system. Haritha Karma Sena collects cleaned plastic and paper wastes, medicine strips, toiletry tubes and covers, broken glass, e-waste and leather products from houses, shops, etc. They assist with biowaste management in households. The workers attend to the issues reported by the households and institutions regarding source level waste treatment within 24 hours and mobilise the support of Haritha Sahaya Sthapanam, if required. They also provide services mentioned in the overall waste management scheme, as directed by the LSGI.

Of the 1034 LSGIs in the state, 611 LSGIs have successfully constituted their own Haritha Karma Senas. A total of 20705 green technicians are currently serving as Haritha Karma Sena members reaching out to about 51.7 lakhs out of 77.16 households in the state. About 163 material collection facilities and 65 resource recovery facilities have been established in different regions of the state that helps Haritha Karma Sena to channelise and process non-biodegradable wastes collected from households and institutions.

Haritha Karma sena plays a vital role in promoting sustainable waste management practices in Kerala. Their efforts have contributed significantly to reducing the amount of waste that goes to landfills and improving the environment in the state.

Through this project, we plan to analyse the socio-economic profile of Haritha Karma Sena workers in Cheranalloor panchayat and study the various government schemes and policies aiding them. We also intend to analyse the effectiveness of the schemes and challenges faced by the Haritha Karma Sena workers in the area.

1.2 REVIEW OF LITERATURE

Rising population levels, economic growth, and higher living standards have contributed mainly to India's rapid increase in waste generation. Waste management is a pressing issue that requires immediate attention in cities worldwide.

Without proper waste disposal and treatment regimes, this poses a crucial existential crisis for humankind.

In the wake of this threat, the government of Kerala has proposed to form "Haritha Karma Sena"- a trained group of waste collectors to collect and segregate waste from city households and transport it to solid-waste treatment facilities. Through this project, we intend to study the socio-economic well-being of the Haritha Karma Sena workers with particular reference to the workers in Cheranalloor Panchayat.

Existing literature has been reviewed, and the following information was collected.

Jacob (2021) focused on and studied the challenges Haritha Karma Sena workers faced to function appropriately in Pothencode Panchayat. She concluded that there is a need for motivation to care for waste management among the community members, and most of them cooperated with the Haritha Karma Sena members. Unfavourable climatic conditions and poor transportation facilities are some of the limitations faced. Nevertheless, proper interventions will help in overcoming the challenges in waste management.

Arjun et al. (2021) studied solid waste management in Tanur municipality. It was observed that the development activities undertaken by the government and local authorities had to be revised according to the area's needs, and the region's booming population overshadowed the waste management process. The significant problems associated with improper waste management are

- Illegal disposal of solid waste,
- Flooding in municipal areas due to blocked drains,
- Dumping food waste in the open dump and drains and improper and untimely collection of solid wastes.

(2021) The Haritha Karma Sena was proposed by the government to control the dumping of waste and for proper collection and segregation of waste. Haritha Karma Sena, also known as

Green Task Force, covers different sections of society, from households to industries. A unit covers almost 200 houses.

Kumar (2020) examined the occupational safety and health of solid waste handlers in Delhi and came to the conclusion that the waste collectors had to face many troubles while handling waste, injuries occur due to complex substances found in solid waste, and many factors play significant roles deciding the Occupational health and safety of the Municipal solid waste workers.

Siji (2013) analysed the role of Kudumbashree in raising the economic status of women, the problems faced by Kudumbashree and their solutions to understand the various types of waste and how they can be managed appropriately compared to the various waste management techniques in different areas. It is stated that less education and a job with permanent income prompted them to choose this career path. It also points out that material and equipment insufficiency, lack of training, and lack of financial and other support from authorities are significant barriers to the success of this system.

Burattini (2005), in his study on HIV infection and related risk behaviour in a community of recycled waste collectors in Santos, Brazil, collected data from 315 waste collectors, out of which 271 were males and 44 were females. The study revealed that the group is vulnerable to HIV and related infections, and both sexual and parental risks are involved in transmission.

Ranade (2000) examined that in India, waste collectors were neither permitted to travel in buses and other public transport nor were they allowed to enter public places like restaurants accruing to their foul odour. Due to their work, most suffer from severe infections and eye and respiratory tract disorders.

1.3 STATEMENT OF PROBLEM

Haritha Karma Sena is a group of trained workers of Haritha Kerala Mission who collect and segregate non-biodegradable wastes from households and establishments for transporting them to shredding units for recycling. The government of Kerala initiated it on 30th December 2019. There are 1,551 Haritha Karma Sena entrepreneurial groups in 850 Grama Panchayats and 88 Municipalities. Haritha Karma Sena has been doing a great job in their field. They are said to cooperate willingly with excellent efficiency, but how satisfied these workers are with their job and work environment needs to be thoroughly studied. This study aims to bridge that gap. Here, a case study is undertaken with particular reference to Cheranalloor Panchayat.

Cheranalloor Panchayat is selected as it is a model unit for Haritha Karma Sena.

1.4 OBJECTIVES

- 1. To analyse the socio-economic profile of Haritha Karma Sena workers in the study area.
- 2. To study various government schemes and policies for Haritha Karma Sena workers
- 3. To analyse the effectiveness and challenges Haritha Karma Sena workers face in the area.

1.5 THEORETICAL FRAMEWORK

1.5.1 Labour Market Theory

Labour market theories explain how wages are determined, and workers are allocated to different jobs. They explain why one group of workers, such as skilled labourers, earns more than others, like unskilled labourers. They provide the basis for understanding labour market problems such as discrimination, poverty and unemployment and suggest policies to alleviate them. The current neoclassical theory of the labour market represents the mainstream approach to labour market analysis. This theory originated in the works of early neoclassical economists such as Alfred Marshall and John Bates Clark during the nineteenth century. The concept of a market for a particular good is a theoretical abstraction that enables economists to analyse exchange between those people or firms who wish to buy the good and those who wish to

supply it. In the labour market, this exchange relationship is between firms who wish to employ labour to produce output and workers who are prepared to work at the going wage rate.

1.6 METHODOLOGY

The sample of 30 HKS workers has been collected on a random basis.

1.6.1 Data Source

Both primary and secondary data were used for this study.

Collection of primary data: Primary data from 30 respondents was collected through personal interviews and schedule methods. Data was collected using a structured questionnaire.

Collection of secondary data: Secondary data includes data collected from newspapers such as Times of India, The Hindu and Deccan Chronicle, Data sources from the government of Kerala, Cheranalloor Panchayat documents which include the list of HKS workers, list of HKS workers who collect plastic waste and plastic collection report (August 2021), and the data collected from the Procedure of Kudambhasree Executive director, State Alleviation Mission. Order No. 10394-D-2017

1.6.2 Sampling Frame

The sampling frame has been fixed by consulting the panchayat. The total number of HKS workers in the particular panchayat was obtained. Out of forty-five workers we collected data from 30 HKS workers by the method of random sampling.

1.6.3 Analysis Tools

Primary and secondary data including information about monthly income, working conditions have been used for analysis.

Percentage, ratio, charts and diagrams were used to analyse the data in this study.

1.7 LIMITATIONS OF THE STUDY

- Due to the study's limited scope, the sample size was small.
- There was a constraint of time for the project.
- The working hours of the HKS workers became a barrier to conducting personnel interviews.
- The ways of income spent by the HKS workers are not clear.
- Educational qualification of the workers has not been recorded.
- Reluctancy of workers in providing personal information was another barrier.

1.8 CHAPTER SCHEME

Chapter 1

The first chapter consists of the general introduction of the study, a statement of the problem, the objectives of the study, the theoretical framework, methodology and limitations.

Chapter 2

The second chapter provides a brief yet insightful overview on the problem of improper waste management systems in our country. It suggests remedial measures to tackle it by citing the example of waste collection workers.

Chapter 3

The third chapter consists of primary data collected from Haritha Karma Sena workers through the schedule survey method, its analysis and possible interpretations.

Chapter 4

The fourth chapter comprises the feedback received from the workers, relevant suggestions for improving their efficiency and a comprehensive conclusion on the entire project.

1.9 CONCLUSION

The chapter examined the global scenario and briefly explained what is happening in waste management in India and the Kerala. It also stated the problem at hand.

CHAPTER 2: OVERVIEW OF WASTE MANAGEMENT IN ERNAKULAM

2.1 INTRODUCTION

This chapter aims to review the existing waste management system in the national level and state level with special reference to district level waste management. In these changed times due importance must be given to the treatment of waste at source particularly at household level. To facilitate an efficient implementation of the same, a proper study of the macro picture is essential.

2.2 INTERNATIONAL, NATIONAL, STATE AND DISTRICT SCENARIO OF WASTE MANAGEMENT

Disposal of solid wastes is a burning and widespread problem in both urban and rural areas in many developed and developing countries. Municipal solid waste (MSW) collection and disposal is one of the major problems of the urban environment in most countries worldwide. Waste disposal in cities is a major challenge due to the large volumes of waste generated by urban populations. Inefficient waste management systems can lead to the accumulation of waste in public areas, which can be unsanitary, aesthetically unpleasant, and pose health risks to residents. MSW management solutions must be financially sustainable, technically feasible, socially and legally acceptable and environmentally friendly. Effective waste disposal in cities requires a comprehensive waste management system that includes proper waste collection, transportation, treatment, and disposal. Cities can work with private waste management companies or establish their own municipal waste management departments to ensure that waste is managed safely and efficiently. The absence of such solutions results in the mounting of wastes and can pave the way towards hazardous situations like the recent incident in Brahmapuram plant of Cochin Corporation which has polluted the environment to an inordinate level where people were finding it difficult to even breathe properly.

Solid waste management issue is the biggest challenge to the authorities of both small and large cities. This is mainly due to the increase in the generation of such solid waste and the burden it poses on the municipal budget. In addition to the high costs, solid waste management is associated with a lack of proper technical awareness over different factors that affect the entire handling system. An analysis of literature and reports related to waste management in different countries and cities showed that only few articles supplied useful quantitative information. The purpose of the above-mentioned studies was to determine the actions of the stakeholders that

have a role in the waste management and to analyse different factors that affect the system. The studies were carried out in 4 continents, in 22 developing countries and in more than 39 urban areas. A mix of several methods that were used in these studies was mentioned in detail in order to encourage the stakeholders and to assess the factors influencing the performance of the waste management in the cities under study.

Population growth, rapid urbanization, booming economy, and the upgraded standard of living in developing countries have substantially accelerated the rate and quantity of municipal solid waste generation.

2.2.1 INTERNATIONAL SCENARIO

Municipalities are the official bodies generally bearing the responsibility of waste management. They have to provide an effective and efficient system to the inhabitants and must ensure that citizens have access to a clean and safe environment. Nevertheless, they often face many issues, the mitigation of which is beyond the ability of the municipal authorities. This is essentially due to shortage of financial resources, lack of an efficient and strict monitoring system and outdated technology.

The composition of MSW varies significantly from one municipality to another and from one country to another. Such variation depends mainly on the lifestyle, economic conditions, waste management systems and industrial pattern. The quantity and the composition of the municipal solid waste are critical for the determination of the appropriate handling and management techniques. Such information is essential and enables us to transfer solid waste to energy conversion facilities within the municipality. Based on the calorific value and the elemental composition of MSW the engineers and scientists can make an assumption on its utility as a fuel. Furthermore, such information will help in predicting the composition of gaseous emissions. Thereafter, this MSW is subjected to energy conversion technologies including gasification, incineration etc. However, the possible hazardous substances occurring in the ash should be treated carefully. In this respect, the composition of the waste will provide valuable information on the utility of the material for either composting or for biogas production as fuel via biological conversion.

Household or municipal wastes are usually generated from a variety of sources where different human activities are involved. Several studies reported that the municipal solid waste that is generated from developing countries are mainly from households (55–80%), followed by market or commercial areas (10–30%).

Waste pickers in low and medium-income countries work on dumps and landfills sifting through highly contaminated household waste and are exposed to health hazards. Informal and organized waste pickers, municipal or private waste collectors/workers, small waste traders and sometimes residents, particularly small children, may be considered vulnerable if exposed to waste-borne hazards.

Establishing door-to-door selective waste collection is a service that contributes to maximizing recycling rates and minimizing environmental hazards by avoiding inadequate waste discard. With their everyday activity of collecting materials for reuse and recycling, waste pickers are working towards resource recovery and are thus at the forefront of a significant change not just stressing waste collection but rather material reclamation. Their praxis is moving away from the growth-oriented logic of wasting towards an ethics of salvaging, recovering, and circularity.

During their interactions with households to collect recyclable materials, waste pickers often perform additional services, such as informing household members about which materials can be recycled, how to best segregate and explain the significance of recycling to the environment. Waste pickers therefore are more than just collectors, and they have the skills and the potential to act as environmental stewards, actively building awareness in the community.

For these tasks to become effective and the service reliable, municipal governments need to commit to a collaborative partnership in waste management. Most organized waste pickers require infrastructural support and capacity training in specific areas (e.g., administration, accounting, work-safety programmes). A set of incentives has been recommended for both private and public sectors for good partnerships in solid waste management service delivery. They also suggest a careful analysis of the available theoretical and empirical data on public/private partnerships to minimize the related risks of these partnerships and its negative impact on vulnerable and marginalized populations. Furthermore, environmental awareness and educational programmes should target selective waste collection as a theme central to human and environmental health, targeting waste pickers and their organizations, communities, schools, child care centres, and health care centres. It is not enough to run occasional campaigns for selective waste collection. Continuous exposure to waste management topics through different media and using diverse methods (e.g., video, photography, theatre, Instagrams, and other social media) has the potential to create the desired effect of greater community

engagement. Looking at the waste management scenario particularly of India, Kerala and Ernakulam we can find that in all levels the management techniques should be improved.

2.2.2 NATIONAL SCENARIO

In India about 62 million tonnes of waste is accumulated per year, out of which 43 million tonnes are collected, and only 12 million tonnes undergo treatment and the rest 31 million tonnes end up in landfills. There are problems in segregation of waste caused mainly because of lack of knowledge on the side of the workers on how to separate waste into different categories.

As the population of the country increased, the waste accumulated has also increased. The main reason for mismanaged waste management is the unscientific approach taken towards it.

The Deonar Landfill in Mumbai and the Ghazipur dump near New Delhi are two infamous dumps in India. Both dumps cause health issues like heart and respiratory diseases to the population living nearby it.

2.2.3 STATE SCENARIO

A focus upon the State's Waste management practices reveal that Kerala is on a mission to implement its flagship 2300 crore Solid Waste Management project which is jointly funded by the AIIB and World Bank which is currently facing some challenges. In the wake of the recent Brahmapuram issue, the world bank has committed to offer expert assistance and loans to the government to set up efficient waste management systems in the state.

2.2.4 DISTRICT SCENARIO

As in the case of Kochi, even though door-to-door waste collection by Haritha Karma Sena workers are being carried out in a fairly efficient manner in most areas, the proper processing of the collected wastes is lagging behind which severely affects the usefulness of the whole door-to-door collection system. Even though crores of rupees are spent by the corporation every year in waste management alone, the mounting waste piles signifies the futility of such huge expenditures and calls for a more result-oriented approach.

2.3 CONCLUSION

Through this chapter we gained an overall view about the waste management scenario around the world, in India, in Kerala and particularly in Ernakulam and came to the conclusion that unscientific and improper management of waste and rising population are the main reasons for increased waste accumulation in the country.

CHAPTER 3:
SOCIO ECONOMIC
PROFILE OF HKS
WORKERS IN
CHERANALLOOR
PANCHAYAT

3.1 INTRODUCTION

To analyse the socio-economic condition of Haritha Karma Sena workers of Cheranalloor Panchayat for the year 2022-23, the following information has been collected by conducting a scheduled survey with a sample size of 30 respondents. Data collected from the Haritha Karma Sena workers includes personal information, income and wage information, information on assistance received from the government, and about work, work environment and working conditions. To avoid the possibility of receiving inaccurate answers or incomplete answers due to difficulties in understanding the question, the scheduled survey method was used.

3.2 PROFILE OF THE STUDY AREA

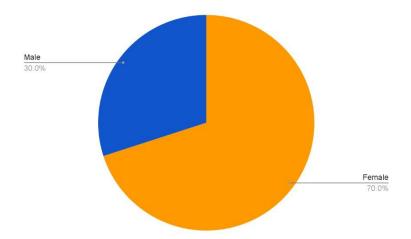
Cheranalloor is a suburb which lies on the banks of Periyar river in Ernakulam district of Kerala with a total area of 10.59 square kilometres. It is considered to be a beautiful and fertile land surrounded by backwaters and brackish lagoons. Cheranalloor is connected to Ernakulam through Chittoor, Edappally and Palarivattom. The village has a population of 30,594 of which 15,157 are males while 15,437 are females as per report released by Census India 2011. The estimated total population for 2023 is about 41000. The literacy rate of Cheranalloor is 97.52 % which is higher than the state average of 94.00 %. Cheranalloor is rapidly developing in terms of commercial options and is attracting Real Estate developers to build multiple residential and commercial projects.

3.3 SOCIAL PROFILE OF HKS WORKERS

3.3.1 Gender Distribution

The female to male sex ratio of the workers in the Panchayat is 7:3, which reveals that about 70 percent of the workforce consists of females.

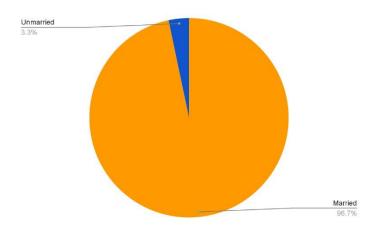
Figure 3.1 Gender Distribution of the workers



Source: Field Survey

3.3.2 Marital Status and Family Strength

Figure 3.2 Marital Status of the workers



Source: Field Survey

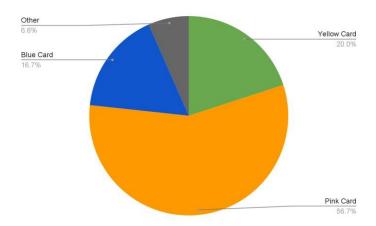
96.7 percent of the Haritha Karma Sena Workers are married individuals who have to run a family of 3-6 members.

3.3.3 Ration card status

The below given data reveals that about 56.7 percent of the workers belong to the BPL category and 20 percent of the workers belong to the most economically backward section of the society who are the beneficiaries of Antyodaya Anna Yojana. This reveals that more than 75 percent

of the workers are economically weak. 6.6 percent of the respondents either have no knowledge about their ration card status or have to change their ration card status from APL to BPL.

Figure 3.3 Ration Card status of the workers

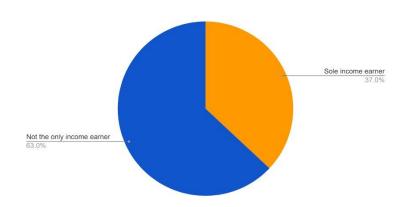


Source: Field Survey

3.4 ECONOMIC PROFILE OF HKS WORKERS

3.4.1 Details of dependents

Figure 3.4 Income earners



Source: Field Survey

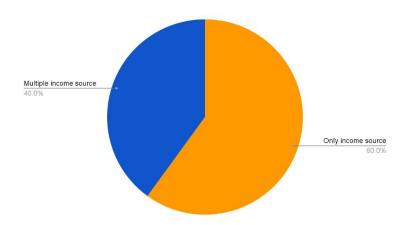
Fig 3.4 shows the data on Income earners of the family.

From the population size of 30 about 37 percent of the workers are the sole income earners of the family consisting of 2-4 members. Out of the 37 percent of the workers 44.44 percent are finding it difficult to run their family with the income received and the remaining 55.55 percent find the income earned sufficient to run their families. The remaining 63 percent of the

population size belong to families where more than one person is employed either as an irregular labourer or in regular paid labour. Out of the 63 percent of the workers who are not the sole income-earners of the family, 14.3 percent find the income earned insufficient to run their family and the remaining 85.7 percent find the income received sufficient to run their family. The workers who found the income insufficient mostly belong to the economically weaker section.

3.3.2 Sources of income

Figure 3.5 Single/Multiple Source of Income



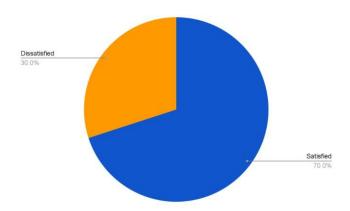
Source: Field Survey

Fig 3.5 Data shows whether or not Haritha Karma Sena work is their only source of income. For 60 percent of the Haritha Karma Sena workers the only source of income to run their family comes for Haritha Karma Sena work so they dedicate a fair share of their time to this job and out of this 60 percent, most (72.3 percent) of them are also the sole income earners of the family having to cater for a family of about 3-5 members and the remaining 27.7 percent find the income earned insufficient to run their families.

The remaining 40 percent of the workers engage in additional jobs after Haritha Karma Sena work as they have to provide for a family of 3-5 members and also, they won't be the sole breadwinner of the family. Thus, they find the income sufficient to run the family.

3.3.3 Income Satisfaction

Figure 3.6 Income satisfaction status



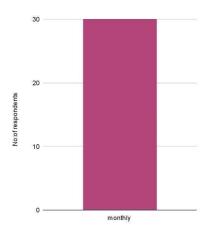
Source: Field Survey

Figure 3.6 shows the data on income satisfaction of Haritha Karma Sena workers. Income of a Haritha Karma Sena worker depends on how many households they cover on a monthly basis for collecting plastic and biodegradable wastes. The workers collect their fees from the households monthly and hand it over to the panchayat officials. Later the income is paid to the workers by the Panchayat at the end of the month after taking ten percent of its share for buying tools and other equipment. Most of the households still show reluctance to pay the fee which affects their income.

From the previous analysis about the income earners and sources of income it is clear why 30 percent of the workers expressed dissatisfaction about the income earned from Haritha Karma Sena work. The main reason for this dissatisfaction is either because they are the sole income earner or they have more than 3 members in their family to provide for. Also, they belong to the economically backward section. The remaining 70 percent are satisfied with their income.

3.3.4 Preference on wage system

Figure 3.7 Preference on Wage system



Source: Field Survey

Figure 3.7 shows the wage-system preference of Haritha Karma Sena workers. Upon enquiry, all the workers responded that they prefer receiving their salary on a monthly basis, some also opined that weekly salary is preferred as they can meet their day to day needs more easily.

3.3.5 Monthly Income Status of The Workers

Table 3.1 Monthly income of workers from plastic collection

Monthly Income	Number of workers
Between 0 to 10,000	21
Between 10,000 to 20,000	8
Between 20,000 to 30,000	0
Between 30,000 to 40,000	1

Source: Field Survey

According to Table 3.1 the average income earned by the workers is about 8,017 Rs.

The income range varies from getting nothing to 40,000 being the highest income earned.

The appearance of such high variations in income earned is due to the fact that the income earned from collection varies from person to person, workers who cover more houses earn greater income compared to others.

3.5 GOVERNMENT SCHEMES AND POLICIES FOR HKS WORKERS

3.5.1 Government insurance services for workers

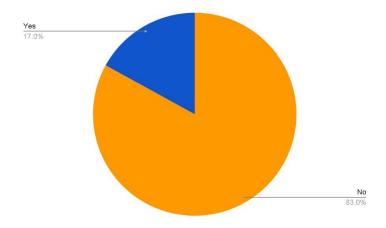


Figure 3.8 Workers receiving insurance services from the Government

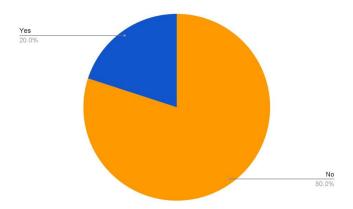
Source: Field Survey

Figure 3.8 shows whether or not the workers receive insurance services from the government. About 83 percent of the workers responded that they do not get any kind of insurance from the government. But the remaining 17 percent stated that they do get insurance services from the government under the leadership of Kudumbashree like the health insurance called INSPIRE. Majority of the people failed to receive this insurance because of the lack of knowledge about the insurance services provided and others are novices. Some people have personal health insurance, so they chose to forgo the government-provided insurance.

The workers also mentioned that a new scheme for them by the government is coming up for providing HKS workers with insurance.

3.5.2 Government pension for workers

Figure 3.9 Workers receiving pension facilities from government

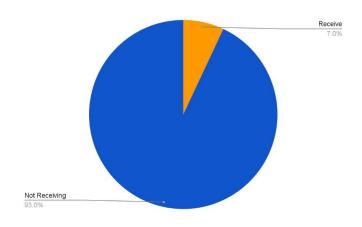


Source: Field Survey

Figure 3.9 shows whether or not the Haritha Karma Sena workers in Cheranalloor Panchayat received any kind of pension from the government. According to data, 80 percent of workers do not receive any government pensions. The rest 20 percent of the workers are receiving government pensions like widow pension, old age pension etc. But they are not entitled to receive any pension being a Haritha Karma Sena worker. This may be because of the absence of an age restriction to work as a HKS worker as such, provision for retirement pension from the job is absent. Any adult individual can be part of Haritha Karma Sena.

3.5.3 Additional financial assistance from the government

Figure 3.10 Workers receiving additional financial support from the government



Source: Field Survey

Figure 3.10 illustrates whether or not Haritha Karma Sena workers in Cheranalloor Panchayat have received any additional funding from the government.

According to the estimate, only seven percent of workers received additional funding from the government. During Onam 2022, they got a government bonus of Rs.1000.

Workers mentioned that they can avail money in case of emergency.

But 93 percent of workers do not receive financial assistance. This is because most are unaware of the fact that they could avail financial assistance from the government during uncertain and emergency situations and festive seasons. Another reason is that they are new to the force and a financial emergency situation did not arise.

Hence, we come to the understanding that it is not that the government is not providing assistance to them but the Haritha Karma Sena workers are unaware about different financial aids provided by the government.

3.5.4 Transportation Facilities

Table 3.2 Transportation facilities used by the respondents

		No. of respondents
Transportation facilities	No. of respondents	(in %)
Tricycle	8	26.67%
Own vehicle	2	6.67%
Others	20	66.66%
Total	30	100%

Source: Field Survey

The Haritha Karma Sena workers are provided with or have transportation facilities which aid their job. Table 3.2 shows the list of transportation facilities which are used by the respondents to aid their job. Out of the 30 respondents, 26.67 percent use tricycles which are provided by the government, 6.67 percent use their own vehicles like auto rickshaws or ape while 66.66 percent use other types of transport facilities which involve collecting by foot etc. Transportation facility is important for the workers as they have to collect waste from different households and bring it to the collection point.

3.6 WORK, WORK ENVIRONMENT & CONDITIONS'

PROFILE OF HKS WORKERS

3.6.1 Satisfaction of Respondents with Their Work

Figure 3.11 Job satisfaction of workers



Source: Field Survey

The figure displays the satisfaction level of Haritha Karma Sena workers towards their job. One can see that all the 30 respondents are satisfied with their work. None of them show dissatisfaction towards their work. This is mostly because they enjoy their work and they are proud of what they do.

3.6.2 Willingness of The Respondents to Do the Job

Figure 3.12 Willingness to work as a HKS worker



Source: Field Survey

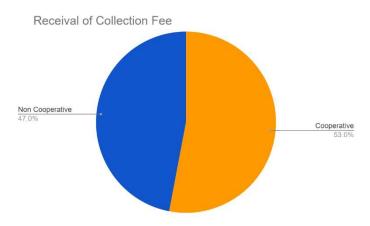
The Haritha Karma Sena workers may willingly or unwillingly do their work. This is graphically shown in the figure given. One can see that all the 30 respondents had taken up the job willingly. None of them were forced to do it.

3.6.3 Work time schedule

The work time schedule varies from worker to worker. As the time schedule is not fixed, they can take up any working time they prefer. Work time taken up by some workers is about two hours and some are 12 hours, this varies according to their health status and age barriers to work long hours.

3.6.4 Timely Receival of Collection Fee from Households

Figure 3.13 Response on regularity in receival of Collection Fee

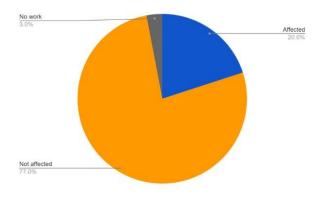


Source: Field Survey

Figure 3.13 reveals that more than 50 percent of the workers responded that they did not face any difficulty in receiving the collection fee on time while others expressed issues like indifferent attitude and deliberate postponement of payment of due amount by the households.

3.6.5 Impact of COVID-19 on Work and Earnings

Figure 3.14 Impact of COVID-19

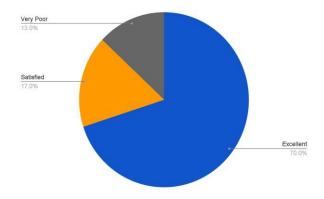


Source: Field Survey

Figure 3.14 portrays how more than 75 percent of workers responded that Covid-19 pandemic did not take a huge toll on their work and earnings, in fact as people were confined to their homes and had no other way for disposal of waste, the waste collection increased which in turn increased their income. The workers went on collecting wastes from different households by adhering to necessary safety protocols. A small fraction of workers expressed minor issues like health problems due to COVID-19 which deterred them from working and one of the workers responded that the question did not apply to him as he joined the team recently.

3.6.6 Cooperation Received from Households

Figure 3.15 Cooperation received from households

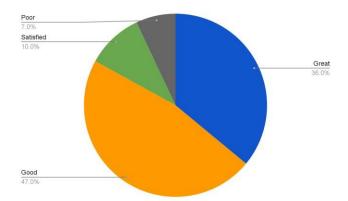


Source: Field Survey

Figure 3.15 reveals that 70 percent of the workers responded that they received excellent cooperation from the households and they had a good rapport with the family members. Another 17 percent of the workers said they had a satisfactory relationship with households. But 13 percent of workers expressed disdain regarding the cooperation they received from the households. This lack of cooperation is due to households' reluctance in paying collection fees to the laborers and an apparent boredom with the Haritha Karma Sena members, seeing them as nothing more than garbage collectors.

3.6.7 Cooperation Received from Panchayat

Figure 3.16 Workers' satisfaction with the cooperation received from the panchayat

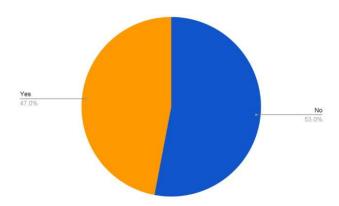


Source: Field Survey

Figure 3.16 shows the satisfaction of Haritha Karma Sena workers with the cooperation received from Cheranalloor Panchayat. 36 percent of the workers responded that the cooperation received from the panchayat is great and they have a smooth relationship with the Panchayat officials. 47 percent workers responded that cooperation from the panchayat is good enough and they have no issues with the officials and another 10 percent of workers are just satisfied with it. But seven percent of the workers opined that the cooperation they received from Panchayat is poor and they also said that Panchayat does not support them. Albeit, most of the workers have a positive opinion about the cooperation received from the panchayat.

3.6.8 Complaints Received about Work

Figure 3.17 Whether workers receive complaints about their work

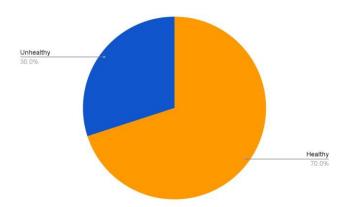


Source: Field Survey

As shown in Figure 3.17, Harita Karma Sena workers in Cheranalloor Panchayat have received complaints about their activities. 47 percent workers in some cases are unable to cooperate with households, they misbehave and get complaints. It is evident that 53 percent of the workers have not received any complaints regarding their work as they display civility, thus the household cooperates with them and hence they do not get complaints.

3.6.9 Health Status

Figure 3.18 Health Status

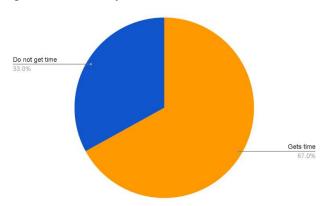


Source: Field Survey

The figure 3.18 shows the data on whether the Haritha Karma Sena workers of Cheranalloor panchayat have any health issues related to their work. From the above figure it is clear that 70 percent workers opined that their job did not affect their health and as most of them belong to the middle age category they are healthy enough to carry out their waste collection works, moreover they enjoy their work. The remaining 30 percent of the workers responded that they experience age-related health issues accruing to their old-age. Apart from this, the workers also suffer from heat, pollution and sometimes heavy loads of work.

3.6.10 Family Time After Work

Figure 3.19 Family time after work



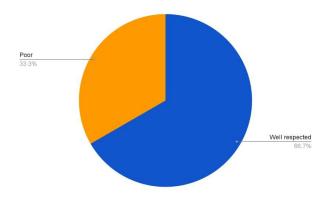
Source: Field Survey

Figure 3.19 shows whether Haritha Karma Sena workers get enough time with their family after work. A majority of the respondents, 67 percent of Haritha Karma Sena workers said that they get enough time to spend with their family and they give priority to their children and family more than anything else. They manage to keep a balance between family and work so that family won't miss them.

The remaining 33 percent responded that they do not get enough family time, workers with small kids and sick family members are finding it difficult to spend time with them because of their job. Haritha Karma Sena workers, especially female workers, find difficulty in striking a balance between household chores and work.

3.6.11 Societal Status

Figure 3.20 Social Status



Source: Field Survey

As per the figure 3.20, the Haritha Karma Sena workers of Cheranalloor panchayat were asked how their job influenced their social status. Haritha Karma Sena workers are extremely proud of their job. Every worker willingly selected this job without any pressure.

The above figure shows that 66.7 percent of Haritha Karma Sena workers did not face any kind of discrimination because of their job and had a respectable status in the society. But the remaining 33.3 percent of respondents expressed dissatisfaction about their social status as they are not getting equal respect which is given to other jobs.

3.6.12 Relationship with co-workers and superiors

Almost every Haritha Karma Sena worker has a healthy relationship with their co-workers and they responded with a sounding yes. But a very few that are less than two percent of workers responded having some minor issues with their co-workers.

Gathering information about the relationship with their superiors we came to know that they had a healthy relationship with their superiors. But less than one percent have very negative feedback about the relationship with their superior and others have a satisfactory relationship.

3.7 CONCLUSION

The chapter revealed the socio-economic standing of HKS workers of the Cheranalloor panchayat. It threw light on the work environment, conditions, government schemes and policies, economic and social profile of HKS workers. The chapter also reflected the changes in the lives of the Haritha Karma Sena members and the efficiency of their work. It explains the importance and cooperation given by the panchayat to the activities of HKS workers.

CHAPTER 4: FINDINGS, RECOMMENDATIONS AND CONCLUSION

4.1 INTRODUCTION

This chapter aims to summarize the major findings and recommendations concluded from the study conducted about HKS workers in Cheranalloor panchayat by collecting information about their income and wage, assistance received from the government, and about work, work environment and working conditions.

4.2 FINDINGS

- Out of the total workforce, 70 percent are women.
- Majority of the workers are married and have to run a family of 3-5 members.
- It can be seen that most of the workers are economically weak. About 40 percent of the workers have an additional source of income apart from their job in Haritha Karma Sena as they face hardships due to income insufficiency.
- Plastic and biodegradable waste collection fees are collected by the workers and sent to the Panchayat every month, out of which 10 percent is taken by the Panchayat and the rest is shared by the workers.
- Most of the workers do not have insurance or get any financial benefits from the
 government as many of them don't have any idea about such amenities thus most of
 the workers lack financial support from the government. The government is also
 making proceedings to cater HKS workers with insurance exclusively for them.
- The covid 19 pandemic did not have any negative impact on their activities. In fact, it only increased the waste collection which in turn increased their income.
- It can be seen that sufficient transportation facilities are provided to the Haritha Karma Sena workers. The workers who don't own their own vehicles are provided with tricycles and other forms of transportation by the panchayat.
- The workers are satisfied with the work that they currently do. This probably is a hint that the Panchayat is doing its best for the smooth functioning of the Haritha Karma Sena and in helping the workers with their worries.
- Most of the Haritha Karma Sena workers are willing to work for the panchayat. But many of them, especially the female workers, find it difficult to balance their household chores and job simultaneously.
- Majority of the workers are not looked down upon by others because of their job, while some do face discrimination.

4.3 RECOMMENDATIONS

When asked about the improvements they would like to see in their work environment about 46.66 percent of the population responded that they were satisfied with the working conditions, they also replied that new digital improvements are coming up and they are eagerly waiting for it.

The remaining workers gave out their suggestions. 30.02 percent raised the suggestion of requiring good quality buckets for waste collection and 6.66 percent raised the suggestion of requiring raincoats for aiding their work during monsoon. Another 6.66 percent said that it would be great if they received some kind of financial assistance from the government. 10 percent responded that more cooperation was needed from the side of the households for the smooth functioning of their work and for them to become more efficient.

The workers must be given financial knowledge on how to handle the income earned and they should be made aware of different schemes and bonuses provided by the government.

Some other improvements that can be undertaken to boost the morale of the workers and improve efficiency of work include:

- Provision for regular and free health-checkups.
- Provision of affordable credit facilities etc

4.4 CONCLUSION

Efficient waste management has become the need of the hour in this fast changing world. To tackle this issue, trained forces like the Haritha Karma Sena must be hired around the globe especially in highly populated countries like India. This not only helps in simplifying waste collection but also helps in solving the problem of unemployment. Ensuring the socioeconomic well being of such workers is also important. Both the citizens and the government must take up equal responsibility in ensuring the well-being of the workers. Through this project, we have analysed the socio-economic profile of the Haritha Karma Sena workers in Cheranalloor Panchayat. From the study, we have come to the conclusion that the Panchayat is doing its best to offer healthy working conditions to the workers, including transportation facilities so that they can do their work efficiently without a hitch. The interests of the workers are heeded to and greatly taken care of. Most of the facilities and schemes introduced have significantly

financial assistance from the government, better quality tools for waste collection and clothes		
	ding their work in monsoon etc so that they can have a better environment both in the cholds and in their workplace.	eir

GLOSSARY

Blue Card – Non priority or APL

HKS - Haritha Karma Sena

LSGI - Local Self Government Institutions

NGOs - Non-governmental Organizations

Pink Card – Priority or BPL

Yellow Card - Most economically backward section of society. Antyodaya Anna Yojana Beneficiaries

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APPENDIX

QUESTIONNAIRE

PERSONNEL INFORMATION

- 1. Name:
- 2. Gender:
- 3. Contact number:
- 4. Age:
- 5. Marital status:
- 6. Children:
- 7. Family strength:
- 8. Ration card status:

INCOME AND WAGE INFORMATION

- 9. Are you or are you not the only earning member of the family?
- 10. Is this your only source of income?
- 11. Is the income sufficient to run your family?
- 12. How do you prefer your wage system?

Daily O Weekly O Monthly O

ASSISTANCE RECEIVED INFORMATION

- 13. Are you receiving any kind of insurance services from the government? If yes, which one?
- 14. Are you receiving any kind of pensions from the government? If yes, which one?
- 15. Are you receiving any kind of additional financial support from the government in case of emergencies? If yes, what type?
- 16. Do you receive any transportation facilities or equipment to aid your job?

WORK, WORK ENVIRONMENT & CONDITIONS INFORMATION

- 17. Are you satisfied with your job?
- 18. Did you willingly take up this job?
- 19. What is your work-time schedule?
- 20. How much money do you receive by selling plastic waste monthly?
- 21. Do you face any difficulty in receiving the collection fee from the households? If no, then do you get it on a regular basis?
- 22. Has covid affected your work? If yes, how intensively did covid affect your work?
- 23. How do you rate the cooperation received from households?
- 24. Are you satisfied with the cooperation being received from the Panchayat?
- 25. Do you receive any complaints about your work?
- 26. Does your health status allow you to perform your job efficiently?
- 27. Are you getting enough time to spend with your family after work?
- 28. How does this job affect your societal status?
- 29. Do you have a healthy relationship with your co-workers?
- 30. Do you have a healthy relationship with your superiors?
- 31. What are your suggestions for improving the work environment?