

Socioeconomic Analysis of the Green Action Force Harithakarmasena

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DOI: <https://doi.org/10.51583/IJLTEMAS.2026.150400054>

Received: 14 April 2026; Accepted: 20 April 2026; Published: 07 May 2026

ABSTRACT

Harithakarmasena (HKS) is a comprehensive women empowerment model developed for Solid Waste Management in rural and urban Kerala. It is managed by Local Self Govts and Kudumbashree. Many women workers were got employment opportunities under this venture. Eventhough it is a successful opportunity for women labour participation many challenges are existing. The present study focusing socio- economic status of HKS workers and their problems in this field. Kannur district of kerala selected as study area. 60 HKS workers of Kannur corporation were randomly selected for the study. Data collected through mailed questionnaire and in-depth interview also conducted with workers. Simple statistical tools, percentage, average- mean, median, pie diagrams were used for analysis. Age, religion, education, marital status, family type, remuneration, partner's job, saving pattern, debt and repayment of debt, reason for preferring this job were analysed. The study revealed that there is substantial change in the Socio Economic conditions of Harithakarmasena workers. 35-45 is the median of age group and Plus two is the mean education of HKS in Kannur corporation. 70% of the workers were married and most of their partners working informal sector. The salary of HKS ranges from 8000- 12000 rupees with the target of covering 55 households. Most of the workers engaged informal jobs before this venture where their salary ranges from 5000-6000 rupees. Most of the workers (38.33%) preferred this job expecting future benefits and 18.33% of workers were preferred for environmental concern. As HKS are connected with kudumbasree, all the workers have thrift behaviour. There is no regular investment behaviour among the HKS workers. 80% of the HKS workers have debt out of which 70% started repayment after got job in Harithakarmasena. Lack of corporation from some households, no restroom and toilet facilities make challenges for their working. Health issues like allergy, backpain and body pain are also hurdle for HKS in Kannur corporation.

Keywords: Harithakarmasena, solid waste management, socio-economic condition, women labour

INTRODUCTION

Haritha Karmasena is a venture working in the field of sanitation and waste management in local self-government bodies in Kerala. In 2017, as part of the Harithakeralam Mission Project implemented by the Government of Kerala, the formation of Haritha Karmasena was held in local self-government bodies. Haritha karmasena is trying to become self-sufficient by creating new products from waste materials, promoting recycling and starting innovative green initiatives. More than 3,6000 haritha karma sena workers are currently working in all the local bodies of the state. The basic facilities, vehicles, uniforms, identity cards etc. required by them are provided under the leadership of the local self-government bodies. (haritham keralam.govt.in, Govt. of Kerala, 2024). The collection will be based on user fee (kudumbashree.org). User Fees is one of the most critical components for the sustainability of the HKS Model. The 2015 Rules allows the collection of user fees from individual households and institutions based on the rates fixed by LSGs. According to the survey of SWM 896 out of the 941 (95%) of the Gram Panchayats have set no user fees for biodegradable waste collection. The situation is more or less similar for municipalities with 77% of the municipalities have not fixed any user fee for biodegradable waste collection. 3 out of the 6 corporations also have not fixed any fee for biodegradable waste collection. While, 45% of the GPs fixed a user fee of Rs 30 per household in case of household nonbiodegradable

waste collection, 31% of the GPs fixed a user fee of Rs 50. Likewise, 22% of the Municipalities had a user fee of Rs 30 for household Non-Biodegradable waste, while nearly 40% had a user fee of Rs 50 for the same. In case of corporations, three out of the six had a user fee of Rs 60 per household for the collection of non-biodegradable waste (SWM REPORT, KILA 2021)

The HKS is a women led, women-owned network of micro-enterprises who undertake collection from houses, institutions and other sources and perform waste storage and segregation activities at Mini MCFs and MCFs respectively, so that the waste can finally be taken for treatment. These enterprising women, who mostly come from the neighbourhood groups (NHGs) fold of Kudumbashree in Kerala, undertake the arduous, labor-intensive task of door-to- door collection of non-biodegradable waste, segregating it at Material Collection Facilities and encouraging source level segregation at the houses and institutions they visit. The user-fees collected by these women from the houses and institutions acts as a source of remuneration for them and helps generate livelihood (SWM Report- Kila, 2021)

Women's labour force participation and access to decent work are important and necessary elements of an inclusive and sustainable development process. Women continue to face many barriers to enter labour market and to access decent work and disproportionately face a range of multiple challenges relating to access to employment, choice of work, working conditions, employment security, wage parity, discrimination, and balancing the competing burdens of work and family responsibilities. In addition, women are heavily represented in the informal economy where their exposure to risk of exploitation is usually greatest and they have the least formal protection (mospi.gov.in). Thus HKS is a productive opportunity for women in kerala to participate in economic activity. It helps to improve their socio- economic conditions in the society.

There are many studies held on women labour force participation and role of Haritha karma sena in solid waste management.

Sreeraj (2025) investigates the role of the Haritha Karma Sena in improving the waste management practices in Kerala, with an emphasis on the environmental, economic, social, and operational implications. The study revealed that Haritha Karma Sena volunteers have a positive impact on waste management. The results also shows that the activities of Haritha Karma Sena significantly plays an important role in reducing improper treatment of waste and there by improve environmental quality.

Shibin etal (2025) study examines the role of Haritha Karma Sena (HKS) in advancing sustainable household waste management in Valanchery Municipality, Kerala. the results show that Haritha Karma Sena has increased trash segregation, collection frequency, and community participation.

Jipson Joseph & Ananya Pandey (2025) tries to critically analyze the Haritha Karma Sena model of waste management in order to examine whether it is a suitable model of waste management. This mission functioned with the field work of Haritha Karma Sena (Green Task Force), mostly employed by uneducated women. They have provided awareness among the public and systematically managed waste with their committed work. However, it also has many drawbacks and failures with regard to its implementation

Albert Alex & R. Saritha (2025) examines the health outcomes, economic stability, and job satisfaction of HKS workers, focusing on women employed in waste collection, segregation, and recycling. HKS supports both economic stability and satisfaction to an extent, health and income challenges reveal key areas for improvement.

Sreekala(2025) examines the role of Haritha Karma Sena (HKS) in achieving dual objectives of income generation and environmental sustainability in Malappuram Municipality, Kerala. Haritha Karma Sena as a scalable model that integrates livelihood enhancement with environmental stewardship, offering valuable insights for policy makers, development practitioners, and local governments aiming to promote sustainable, inclusive development.

Thodukayil et al.(2024) there was a negative societal perception towards them, and secondly, there was a lack of appropriate state response to their needs and requirements. These challenges were attributed to gaps and

pitfalls in the formalization process, leading to a lowered socio-economic status for the women, increased vulnerability to health hazards, and societal stigma.

Most of the studies on HKS focused on their role in SWM. The present study focusing socio economic conditions and challenges of HKS in Kannur district. Kannur is the star performer with waste being collected by HKS from up to 70% of households, Thiruvananthapuram district lags behind with waste being collected by HKS from only 27% of households (SWM REPORT, KILA 2021).

Objectives of the Study

1. To understand the socio- economic status of Harithakarmasena workers in Kannur
2. To evaluate challenges of Harithakarmasena workers in Kannur

METHODOLOGY

The study is based on primary data collected from Harithakarmasena workers in Kannur corporation. There are 112 Haritha karmasena workers in Kannur corporation out of which 60 workers were randomly selected as sample for the study. A depth interview conducted to understand their problems in this field. Data collected through mailed questionnaire. Simple statistical tools (Average, percentage, histogram, pie diagrams were used for the analysis. Secondary information related to the study were collected from website of Government of Kerala, Kudumbashree mission, Local self Govt, Harithakarmasena region office, kannur.

RESULT AND DISCUSSION

The study revealed that there is substantial change in the Socio Economic conditions of Harithakarmasena workers, It is a successful venture helped improve their socio- economic status. The results of the study are following

Religion

Religion is an important variable affects the female labour force participation. Studies suggest that Muslim and Sikh women have lower odds ratio of labour force participation (Sujata Kar, 2025). As in the case of harithakarmasena workers all the selected samples belongs to Hindu religion. There is no worker from other religion.

Age

Age based disparities are highly seen in labour force participation. In the case of harithakarmasena workers 25-55 is the age structure. There is no worker below 25 and above 55. The age distribution of workers shown in table below

Age wise distribution of sample

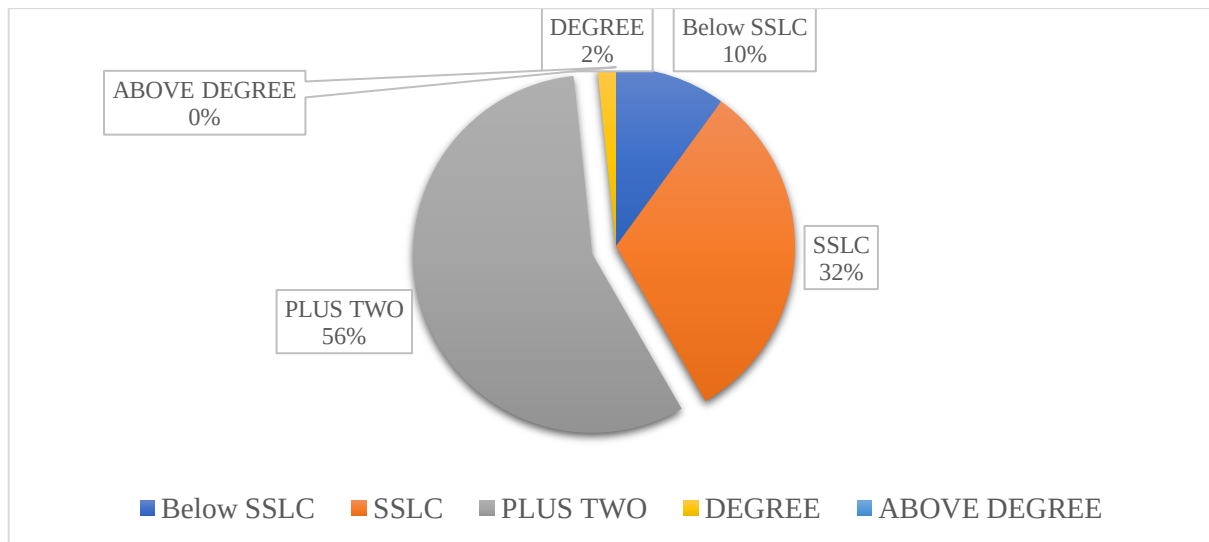
Age group	No. Of workers	Percentage
15-25	0	0
25-35	19	31.67
35-45	33	55
45-55	8	13.33
55-65	0	0

Source: primary data 2026

It is understood that 35-45 is the median age group of HKS workers, 55% of the samples belonging to this group. Followed by 25-35 age group with 31. 67% and lower participation from age group 45-55 years.

Education

Education and employment are highly connected variables. As far as Kerala concerned underemployment trend is highly seen. People are unable to find job according to their qualification. They are forced to enter the economic activity which is below their skill. The distribution of education among the sample is given in pie diagram



Source: primary data 2026

It is found that Plus two is the mean education of HKS in Kannur corporation, 56% have plus two and 32% qualified their SSLC. Ten percentage people belongs to below SSLC. As education is the mean for attaining economic activity, better education leads to better job opportunities. As far as HKS field concerned there is no need of high education, skills and experience. But it is noticed that degree qualified workers are also in this field (2%) which pointing out the underemployment reality of Kerala Economy.

Marital and family status

As far as women concerned marriage and motherhood is biggest hurdle for their economic contribution. Marital status of HKS are given in the table below.

Marital status	No. of workers	Percentage
Married	42	70
Unmarried	5	8.33
Widow	13	21.67

Source: primary data 2026

Out of 60 workers 70% were married, 21.67% were widowed and 8.34% were unmarried. The married workers were started to participate in labour force after 5- 7 years after marriage. It is understood that they are ready to part of economic activity when they had many financial constraints in their life. Out of the 42 married HKS workers their partners are working under informal sectors as shown in the table below

Job	Frequency	Percentage
Fishing	4	9.52
Autorikshaw driver	18	42.86
Small scale household business	20	47.62

Source: primary data 2026

It was also found that 58.30% are belonging to joint family and 41.7% are nuclear family. Eventhough family setup is a big hurdle to women labour force participation, HKS workers opined that joint family gave protection to their children when they are engaged in their economic activity and nuclear family getting all types of freedom for the women households.

Remuneration

As economic benefit is the prime motive for labour force participation, The average monthly income of HKS members in Municipalities is the most - Rs 10,343, as opposed to Rs 8,583 in Corporations and just Rs 3,766 in GPs. The average monthly income of HKS members working in Panchayats is barely sufficient, risking making the model unsustainable in these areas. There are, however, some outliers, with the average monthly income of HKS members in GPs of Kottayam and Kasargod being as high as Rs 12,575 and Rs 6,022 respectively (SWM REPORT, KILA 2021).

HKS workers in Kannur corporation were earning maximum amount of 10,000 per month and maximum of 2000 rupees as allowance. Thus the amount 12000 rupees can be get only when satisfying conditions like no leave, covering on an average 55 households per month. Eventhough there is no formal restriction for taking leave but they have to face economic loss of around 385 rupees per day. User fee collected from households is the source of their remuneration. The collected userfee will be transferred to the office account and their salary is handover to their hand on last day of the month.

Income (in rupees)	No. of workers	Percentage
Below 8000	0	0
8000-10000	28	46.67
10000-12000	32	53.33

Source: primary data 2026

As the salary of the workers depends upon number of households they visit per month. Their salary varies between 8000- 12000 rupees per month. Out of the 60 sample workers 46.67% were getting monthly income of 8000-1000 rupees and 53.33% were earning 10000- 12000 rupees.

Most of the workers (80%) engaged in informal jobs before HKS and earned maximum income of rupees 5000-6000 range.

Reason for prefering job

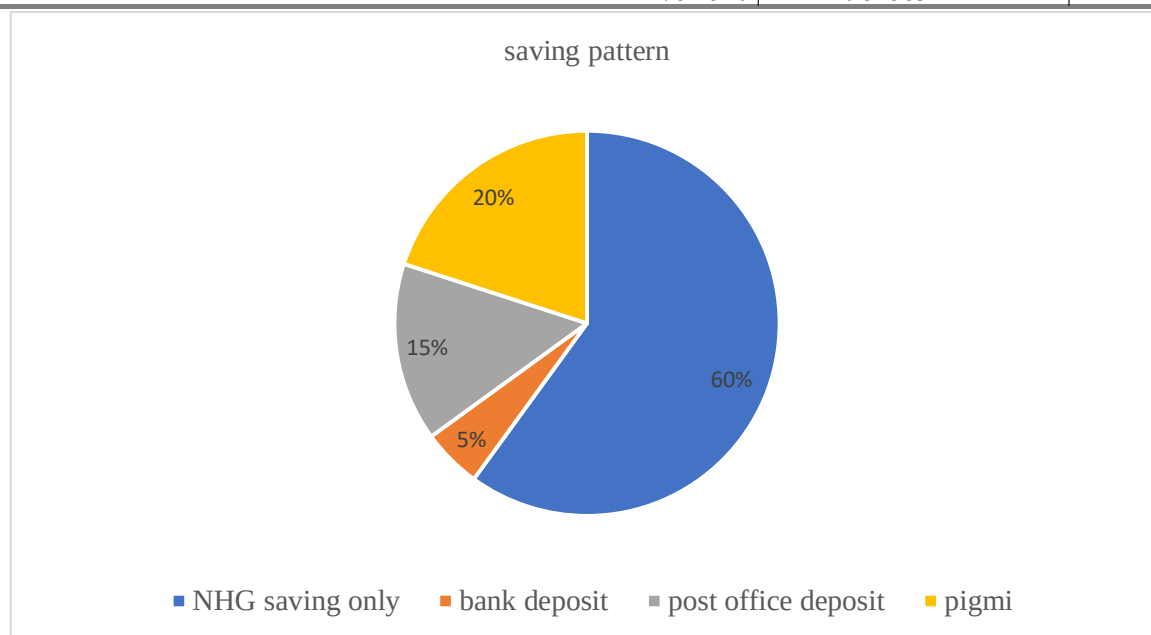
Reason	Frequency	Percentage
Time flexibility	22	36.67
No skill/ experience needed	4	6.67
Future benefit	23	38.33
Environmental protection	11	18.33

Source: primary data 2026

Most of the workers (38.33%) preferred this job expecting future benefits. 36.67% workers were preferred due to time flexibility, there is no exact duty time. 18.33% of workers were environmental concern and 6.67% were preferred because they have no other job experience or skill.

Saving, investment and debt of HKS

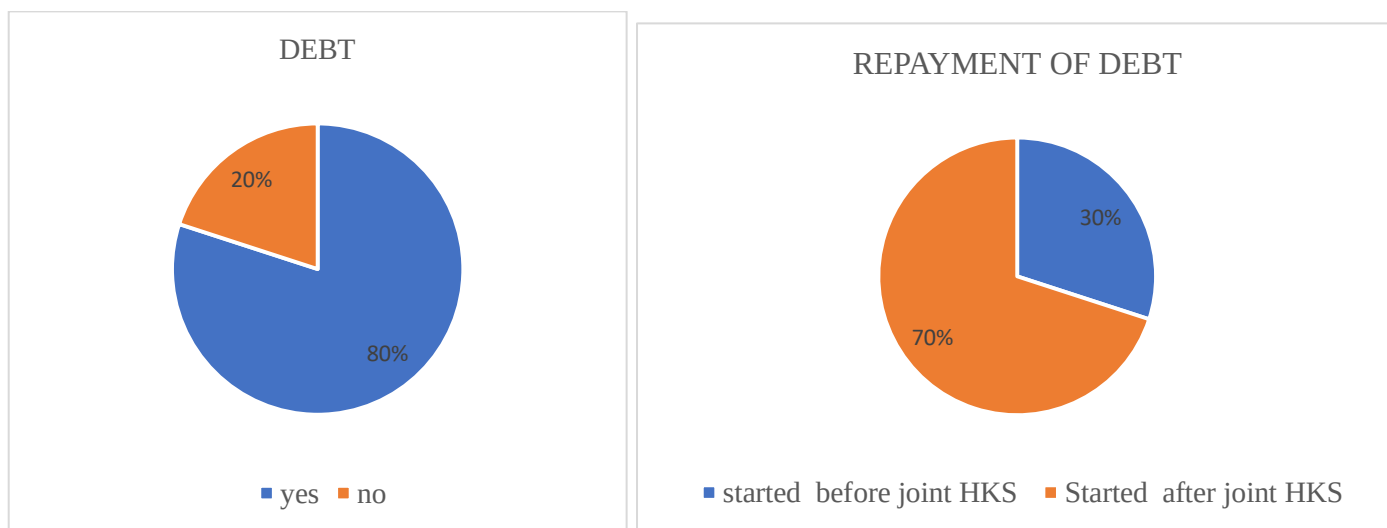
As HKS are connected with kudumbashree, all the workers have thrift behaviour. Out of which 60% have NHG thrift only. Others have extra savings in banks and post office. 20% have pigmi savings 15% have post office deposit and 5% have bank deposit as shown in figure below



Source: primary data 2026

Investment involves risk factor, it is preferred by risk lovers. There is no regular investment behaviour among the HKS workers only 4% of the workers have gold investment.

Debt and repayment of debt is an indicator of economic progress. 80% of the HKS workers have debt, most of them take loan from Kudumbhashree and 70% started repayment after got job in Harithakarmasena.



Source: primary data 2026

Challenges

Even though HKS is a good model for solid waste management and women empowerment there are many challenges to be addressed.

No-Co-operation from the part of households is a big hurdle. Some households are not ready to pay user fee, some are not properly dumping waste sometimes plastic waste were mixed with food waste. Waste carrying vehicle will not travel to narrow roads, so HKS workers sometimes have to carry heavy weights to road side. which create health issues for workers, they suffer with back pain and body pain. Inadequate safety tools and hazardous waste handling leads to allergy and other related health problems.

CONCLUSION

HKS is a successful model for women empowerment and SWM in rural and urban area. Workers in urban area have good socio- economic condition and their economic and social status improved after joint HKS. Good awareness to the public about waste management and adequate supply of equipment and insurance coverage should be ensured.

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