

SOCIO-ECONOMIC FACTORS DETERMINING POVERTY AMONG WOMEN-HEADED FAMILIES IN MULLAITIVU DISTRICT OF SRI LANKA

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Abstract

This study examines the socio-economic factors influencing poverty among Women Headed Households (WHHs) in the Thunukkai Divisional Secretariat of the Mullaitivu District, Sri Lanka. A simple random sampling technique was employed to select 50 WHHs, and data were collected using structured questionnaires and interviews. The data were analyzed using descriptive statistics, including means, frequency tables, percentages, standard deviations, and an independent sample t-test. The results reveal that the average monthly income of these households was Rs 14,078, with a mean expenditure of Rs 14,756, indicating a slight imbalance between income and spending. The demographic profile showed that the majority of the women (75%) were older, with an average age of 47 years. Most respondents (40%) had married before the age of 20, and 96% had completed education up to the advanced level. The results show that poor WHHs are older, have more children, and have larger family sizes compared to non-poor households. Additionally, poor WHHs have more household management experience, but significantly lower incomes, expenditures, and total savings. The findings highlight the complexity of poverty in WHHs, where socio-economic factors like education and job income play critical roles in determining economic status. The study offers valuable insights for policymakers, government agencies, and non-governmental organizations to design targeted interventions addressing the specific needs of WHHs. By focusing on increasing educational opportunities, improving access to job income, and providing social support, the study contributes to shaping effective poverty reduction strategies aimed at alleviating the hardships faced by WHHs in post-conflict Sri Lanka.

Keywords: *women-headed families, poverty determinants, socio-economic factors, demographic characteristics, Mullaitivu district*

1. Introduction

The first sustainable development goal is no poverty. "According to the 2016 Census report in Sri Lanka, 4.1% of the people are living under the national poverty line. In Sri Lanka, the proportion of employed people below \$1.90 purchasing power parity a day in 2019 is 0.4%." (Source-ADB-2021) Thus the first sustainable development goal is achieved by Sri Lanka. Sri Lanka's expected lifespan and literacy rate are approximately comparable to developed countries, and it even ranks top in the South Asia region. Poverty is defined as a lack of income and access to productivity, a lack of purchasing power, investment risk, obesity, a high death rate, decreased life expectation, and poor access to economic and social services (Adebayo, 2013). The Department of Census and statistics (D.C.S.) estimates official poverty statistics for the Government of Sri Lanka depending on household income and expenditure surveys (HIESs). In 2023, per capita expenditure per person was 5462 Sri Lankan rupees. The people who spent below this level are considered to be living below the poverty level.

Unfortunately, in the thirty years of war all types of resources of the country, physical resources, and human resources have suffered much. Significantly, North and East region were suffered more from the war. The last war happened in the Mullaitivu district and this district was extremely backward than other districts of the country. In 2013 and 2014, this district was announced as having a higher incidence of poverty. (Central Bank report of Sri Lanka-2014)

1. Background of the study

Mullaitivu has six Divisional Secretariats. Thunukkai is one of the less developed Divisional Secretariat based on infrastructure and human resources. This division has 4167 families and 12,632 individuals. Out of this population, males are 6063, and females are 6569. The gender ratio is as 48:52, approximately equaling. (District Statistical Profile-2023). In Sri Lanka, 1.4 million households are headed by women (Household Income and expenditure survey-HIES-2019). Out of this number, 7201 women heads live in the Mullaitivu district. Especially in this district, 16% of household's heads are women. In thunukkai division, 451 WHHs are there.

Table 01: Women Headed Families in Thunukkai Division

Places	Husband death	Separation /Divorce	Missing Persons	Husband disable	Spinster	Total
Thunukkai	353	71	04	05	18	451
Mullaitivu	5460	1477	116	114	34	7201

(Source- District statistical handbook-2023)

The research problem revolves around the vulnerability of WHHs in the Thunukkai Divisional Secretariat of the Mullaitivu District, where 451 such households are facing significant socio-economic challenges. These households experience more displacements, resettlements, and distortions of their properties and human resources compared to male-headed households, often with limited income and essential livelihood needs unmet. The study aims to identify the demographic characteristics of these households and analyze the socio-economic factors influencing their poverty levels, dividing the households into poor and non-poor groups. By examining various socio-economic variables, the study seeks to understand how these factors contribute to poverty in WHHs, providing insights to help policymakers, government, and NGOs better assist this vulnerable group.

This study is crucial as it will provide insights into the socio-economic challenges faced by WHHs in a post-conflict region. With limited research on the specific factors affecting poverty in these households, the study will offer valuable data on how socio-economic factors such as education, job income, and family size impact their poverty levels. The findings will help inform the development of targeted policies and interventions to improve access to education, employment, and social support for WHHs, ultimately reducing poverty and promoting gender equality in the region. The study's outcomes will be instrumental in shaping effective poverty reduction strategies tailored to the needs of these households.

Takanne (2007) identified several critical characteristics of female-headed households, highlighting the disadvantages they face in terms of labor availability, farm size, and agricultural output when compared to male-headed households. Female-headed families often experience lower productivity in own-farm cultivation, primarily due to the inability to afford essential inputs such as fertilizers, which are often out of reach for poorer households due to their high cost.

The World Bank (2000) defines poverty as the lack of prosperity, noting that individuals are considered poor when their income or consumption falls below the minimum standard necessary for maintaining basic well-being. This traditional definition of poverty emphasizes income insufficiency as the primary determinant of poverty.

Guo and Wang (2021) emphasized that increasing employment opportunities has become a more effective and sustainable solution for poverty alleviation. Employment not only provides additional income but also enhances the self-esteem of workers. Those with higher education levels and better employment positions tend to earn higher wages, which in turn allows them to gain more economic benefits from maintaining good health compared to individuals with lower education and less-skilled jobs.

Jayathilaka et al. (2020) highlighted the significant disparity in poverty levels between different marital statuses, noting that married women heads of households (WHHs) in Sri Lanka have a higher poverty rate compared to single women. They further identified that poverty is most prevalent in the estate sector, where the incidence of poverty is approximately twice as high as in urban areas. Additionally, regional disparities in poverty among female-headed households were observed, with ethnicity playing a contributing role. The study emphasized the need for improved educational opportunities, technical training, and enhanced social interactions among industrial partners to foster a more supportive working environment for female heads of households.

2. Methodology

The study was conducted in the Thunukkai Division of the Mullaitivu District. The respondents were WHHs, with a total of 50 households (10% of the population) selected using a simple random sampling technique. These respondents were household heads residing in the Mullaitivu District and engaging in various economic activities within the area.

Data were collected using well-structured questionnaires designed to gather both quantitative and qualitative information regarding the socio-economic and demographic factors influencing poverty among WHHs. The data analysis included descriptive statistics such as means and standard deviations to summarize the socio-economic and demographic characteristics of the respondents. To differentiate between poor and non-poor WHHs, a comparative mean analysis was used.

An independent sample t-test was conducted to examine the influence of various socio-economic and demographic variables (independent variables) on the poverty status (dependent variable). The dependent variables included all scale variables related to socio-economic and demographic characteristics, each tested individually to determine their association with poverty.

3. Results and Discussions

A total of fifty samples were drawn from the research area, comprising both poor and non-poor households, with 46% from the former and 54% from the latter. The primary factors contributing to the prevalence of WHHs in this area include the death of husbands (56%), abandonment or divorce (34%), missing husbands (6%), and husbands who have migrated (4%). The average age of the WHHs is 47 years, with the respondents' ages ranging from 22 to 70. All the respondents were married between the ages of 16 and 32, with the overall average age at marriage being 22. The maximum number of children reported by respondents was four, while the mean number of children was one.

The family size of the respondents ranged from one to five members, with the average family size being two. Educational attainment among the respondents was notably low, measured in terms of years of schooling, ranging from 0 to 16 years. Only two respondents (4%) had attained a university degree, while the remaining 96% had completed up to 12 years of schooling. Half of the respondents had completed only up to five years of education. The length of women-headed household experience varied from two to 45 years, with 75% of respondents having less than 12 years of experience as household heads.

Regarding employment, 20% of the respondents were unemployed, with an average of two years of education. Among the unemployed group, five individuals were classified as poor, while the others were

non-poor. In terms of family structure, 76% of the respondents belonged to nuclear families, while 24% lived in joint families. With regard to occupation, 36% of the respondents were self-employed, engaging in activities such as running small businesses, cattle farming, sewing, operating micro-industries, and producing food for school children. A further 26% were daily wage workers, employed in agriculture, industry, and the service sector. Additionally, 10% were involved in agricultural cultivation, and 6% worked as government employees, predominantly as teachers in secondary schools or as preschool teachers in the public sector.

The total monthly income of the respondents ranged from Rs 5,000 to Rs 45,000, with the average income being Rs 14,078. Of the respondents, 50% earned less than Rs 10,000 per month, and 75% earned less than Rs 15,400 per month.

3.1. Mean analysis between poor and Non-poor WHHs

The socio-economic factors of WHHs categorized as poor and non-poor show differences in their mean and standard deviation values. The mean age of WHHs living below the poverty line is approximately 49 years, whereas the mean age of non-poor respondents is around 45 years. Generally, poor individuals tend to be older than their non-poor counterparts. The mean age at marriage is similar for both groups, with both having an average of around 22 years. However, the experience of being a household head differs between the two groups. Poor respondents have more experience, with an average of 13 years, compared to 9 years for non-poor respondents. The mean family size for poor households is 3, while for non-poor households, it is 2. Additionally, the number of children is higher among poor households, with an average of 2 children, compared to 1 child in non-poor households.

Table 02: Comparison of Mean Analysis

Variables	Poor W.H.H.s		Non-poor W.H.H.s	
	Mean	Std. Deviation	Mean	Std. Deviation
1. Age	48.65	11.171	45.52	14.815
2. Age at marriage	22.57	4.208	21.11	5.951
3. WHHs experiences	13.04	10.052	8.59	4.299
4. Family size	2.65	1.229	2.04	1.018
5. No of children	1.65	1.229	.96	1.018
6. Education in years	4.61	4.186	6.22	4.886
7. Experience	11.30	11.227	6.52	5.459
8. Job income	6086.96	4316.070	12224.07	12113.163
9. Working hours	4.57	3.174	5.67	3.419
10. Working days	3.96	2.477	4.11	2.242
11. Monthly saving	223.91	455.240	170.37	299.762
12. Total expenditure	9878.26	4272.715	17059.07	8574.416
13. Value of assets	980434.78	329855.041	931481.48	446600.008
14. Total saving	33913.04	48942.372	32962.96	94742.762
15. Loan amount	52608.70	52675.455	114851.85	235525.224
16. Total grant	2882.61	1369.440	2383.33	2430.851
17. Total income	10369.57	5364.482	17237.48	11664.197
18. Land size	.8478	.65600	.7500	.50000

(Source-SPSS output)

The data presented reflects the socio-economic differences between poor and non-poor WHHs across various variables. Here's an interpretation of the results:

The mean age of poor WHHs (48.65 years) is slightly higher than that of non-poor WHHs (45.52 years). This indicates that, on average, poor WHHs tend to be older than their non-poor counterparts. Additionally, the standard deviation for poor WHHs (11.17) is smaller than that for non-poor WHHs (14.82), suggesting a narrower range of ages within the poor group. The mean age at marriage is similar for both groups, with poor WHHs marrying at an average age of 22.57 years, and non-poor WHHs marrying at 21.11 years. While the difference is minor, the standard deviation for non-poor WHHs (5.95) is notably larger than for poor WHHs (4.21), indicating more variation in the age at marriage among non-poor individuals.

Poor WHHs have more experience in managing their households (13.04 years) compared to non-poor WHHs (8.59 years). This difference may reflect the longer duration of household headship in the poor group, which could indicate the challenges they face over time. The higher standard deviation for poor WHHs (10.05) suggests greater variability in the length of their experience compared to non-poor WHHs (4.30). Poor WHHs have a larger average family size (2.65 members) compared to non-poor WHHs (2.04 members). This may be linked to the greater number of children reported in poor households, as seen in the next variable. The lower standard deviation for poor WHHs (1.23) suggests less variability in family size compared to non-poor WHHs (1.02).

The number of children is higher among poor WHHs (1.65) compared to non-poor WHHs (0.96). This reflects a trend of larger families in poor households, consistent with the findings on family size. The standard deviations for both groups are similar (1.23 for poor and 1.02 for non-poor), indicating that the number of children varies in both groups, but more markedly for poor households. Poor WHHs have an average of 4.61 years of education, while non-poor WHHs have 6.22 years of education. This shows that, on average, non-poor households are more educated. The standard deviation for poor WHHs (4.19) is smaller than for non-poor WHHs (4.89), suggesting less variability in educational attainment among the poor group.

Poor WHHs have more job-related experience (11.30 years) compared to non-poor WHHs (6.52 years). This difference may suggest that women in poor households have been engaged in economic activities for a longer period. The higher standard deviation for poor WHHs (11.23) indicates a wider range of experience compared to non-poor WHHs (5.46). The mean job income for poor WHHs (Rs 6,086.96) is significantly lower than for non-poor WHHs (Rs 12,224.07). The high standard deviation for both groups (Rs 4,316.07 for poor and Rs 12,113.16 for non-poor) indicates substantial variation in income within both groups.

Poor WHHs work an average of 4.57 hours per day, while non-poor WHHs work slightly more at 5.67 hours. The smaller standard deviation for poor WHHs (3.17) suggests more consistency in working hours compared to non-poor WHHs (3.42). Poor WHHs work an average of 3.96 days per week, while non-poor WHHs work 4.11 days. The smaller standard deviation for non-poor WHHs (2.24) indicates that their working days are more consistent compared to poor WHHs (2.48).

Poor WHHs save an average of Rs 223.91 per month, while non-poor WHHs save Rs 170.37. However, the standard deviation for poor WHHs (455.24) is much higher, indicating that savings among poor WHHs vary greatly, while the savings of non-poor WHHs are more consistent (299.76). Poor WHHs spend Rs 9,878.26 on average, while non-poor WHHs spend Rs 17,059.07. The higher standard deviation for non-poor WHHs (Rs 8,574.42) suggests greater variability in their expenditures compared to poor WHHs (Rs 4,272.72).

The value of assets for poor WHHs is Rs 980,434.78, while non-poor WHHs have slightly higher-valued assets at Rs 931,481.48. Despite this, the standard deviation for non-poor WHHs (Rs 446,600.01) is much

higher than for poor WHHs (Rs 329,855.04), indicating that asset values are more diverse in non-poor households. The total savings for poor WHHs average Rs 33,913.04, while non-poor WHHs have slightly lower savings at Rs 32,962.96. However, the savings of poor WHHs show greater variation (Rs 48,942.37) compared to non-poor WHHs (Rs 94,742.76).

Poor WHHs have an average loan amount of Rs 52,608.70, while non-poor WHHs have significantly higher loans, averaging Rs 114,851.85. The standard deviation for loans in non-poor households (Rs 235,525.22) is much larger, indicating a wider variation in loan amounts among non-poor WHHs compared to poor WHHs (Rs 52,675.46). Poor WHHs receive an average total grant of Rs 2,882.61, while non-poor WHHs receive Rs 2,383.33. The standard deviation for poor WHHs (Rs 1,369.44) is larger than for non-poor WHHs (Rs 2,430.85), indicating greater variation in grants received among poor households.

The total income for poor WHHs averages Rs 10,369.57, while non-poor WHHs have an average total income of Rs 17,237.48. This shows a significant income disparity between the two groups. The standard deviation for non-poor WHHs (Rs 11,664.20) is much larger than for poor WHHs (Rs 5,364.48), reflecting greater income variability among non-poor households. Poor WHHs own an average land size of 0.8478 acres, while non-poor WHHs own 0.75 acres. The standard deviations are relatively similar (0.65600 for poor and 0.50000 for non-poor), suggesting that land ownership is similarly variable across both groups.

The comparison highlights significant socio-economic disparities between poor and non-poor WHHs, particularly in terms of income, job-related experience, and savings, with poor households generally having lower income, fewer savings, and smaller asset values.

Table 03: Independent Sample t-test for proving the Mean Difference of the Two Types of WHHs

Variables	t	P-Value	Mean difference
1. Age	.832	.409	3.134
2. Age at marriage	.981	.332	1.454
3. WHHs experiences	2.090	.042*	4.451
4. Family size	1.936	.049*	.615
5. No of children	2.169	.035*	.689
6. Education n years	-1.242	.220	-1.614
7. experience	1.962	.046*	4.786
8. job income	-2.305	.026*	-6137.118
9. Working hours	-1.173	.247	-1.101
10. woking days	-.232	.818	-.155
11. monthly saving	.498	.621	53.543
12. total expenditure	-3.645	.001*	-7180.813
13. value of Assets	.434	.666	48953.301
14. Total saving	.043	.966	950.081
15. Loan amount	-1.240	.221	-62243.156
16. Total grant	.873	.387	499.275
17. total income	-2.597	.012*	-6867.916
18. land size (acare)	.598	.553	.09783

(Source-SPSS output, Single star refers 5% level of significance)

The results of the independent sample t-test were used to assess the mean differences between poor and non-poor WHHs across various socio-economic and demographic variables. The variables with a p-value less than 0.05 (*) indicate a statistically significant difference between the two groups.

First, significant differences were found in the WHHs experiences ($p = 0.042^*$), with poor WHHs having more experience in managing their households, showing a mean difference of 4.451 years. This suggests that poor WHHs have been managing their households for a longer duration on average compared to non-poor households. Similarly, the family size ($p = 0.049^*$) was significantly larger for poor WHHs, with a mean difference of 0.615 members, implying that poor households tend to have more members. Additionally, the number of children ($p = 0.035^*$) was higher for poor WHHs, with a mean difference of 0.689, indicating that poor households generally have more children compared to their non-poor counterparts.

The job experience variable also revealed a significant difference ($p = 0.046^*$), with poor WHHs having more job experience on average, with a mean difference of 4.786 years. This may reflect a longer engagement in economic activities due to financial necessity. Furthermore, there was a significant difference in job income ($p = 0.026^*$), with poor WHHs earning significantly less, showing a mean difference of Rs -6,137.12. This finding highlights the income disparity between poor and non-poor households. Likewise, total expenditure ($p = 0.001^*$) was significantly lower for poor WHHs, with a mean difference of Rs -7,180.81, indicating that poor households spend less on average than non-poor households. Finally, total income ($p = 0.012^*$) showed a significant difference, with poor WHHs earning less overall, with a mean difference of Rs -6,867.92.

On the other hand, several variables did not show statistically significant differences between poor and non-poor WHHs. These include age ($p = 0.409$), age at marriage ($p = 0.332$), and education in years ($p = 0.220$). The lack of significant differences in these areas suggests that age, marriage age, and educational attainment may not be key factors distinguishing the poverty status of WHHs in this sample.

Other non-significant variables included working hours ($p = 0.247$), working days ($p = 0.818$), monthly saving ($p = 0.621$), value of assets ($p = 0.666$), total saving ($p = 0.966$), loan amount ($p = 0.221$), total grant ($p = 0.387$), and land size ($p = 0.553$). These variables do not appear to play a significant role in differentiating between poor and non-poor households in this study, suggesting that they might not be major factors contributing to poverty levels in the context of WHHs.

The results reveal that poor and non-poor WHHs differ significantly in terms of certain socio-economic factors such as household experience, family size, number of children, job income, total expenditure, and total income. However, other factors such as age, education, and assets do not show significant differences, suggesting that these variables may not be as influential in determining the poverty status of WHHs in the studied area.

4. Conclusion and Recommendations

This study highlights significant socio-economic disparities between poor and non-poor WHHs, particularly in terms of household experience, family size, number of children, job income, total expenditure, and total income. The findings suggest that poor WHHs tend to have more experience in managing their households, larger families, and lower incomes compared to their non-poor counterparts. However, factors such as age, education, and assets did not show significant differences, indicating that these variables may not be as critical in determining poverty among WHHs in the studied area.

Based on these findings, it is recommended that policy interventions focus on improving the economic opportunities for WHHs, particularly in terms of income generation and financial support. Targeted programs that provide access to education, skills training, and employment opportunities can help reduce the income disparity between poor and non-poor WHHs. Additionally, support for family planning and child

care services could help address the challenges posed by larger family sizes in poor households. Finally, improving access to social grants and loans could contribute to enhancing the financial stability of WHHs, thereby reducing poverty in these communities.

5. References

- Adebayo, O. O. (2013). Analysis of poverty level among urban households in Irewole Local Government Area of Osun State. *Global Journal of Arts, Humanities, and Social Sciences*, 1(1), 13–19.
- Asian Development Bank. (2021). *Poverty in Sri Lanka*. Retrieved from <https://www.adb.org/countries/sri-lanka/poverty#accordion-0-0>
- Central Bank of Sri Lanka. (2010-2020). *Annual report*.
- District Secretariat, Mullaitivu. (2023). *District statistical profile*. Mullaitivu.
- Guo, Y., & Wang, J. (2021). Poverty alleviation through labor transfer in rural China: Evidence from Hualong County. *Habitat International*, 116(May), 102402. <https://doi.org/10.1016/j.habitatint.2021.102402>
- Jayathilaka, A., & Wijesinghe, M. D. J. W. (2020). Female headship and poverty in Sri Lanka: A household level analysis. *International Journal of Research and Innovation in Applied Science (IJRIAS)*, 5(9), 145–150. <https://doi.org/10.51224/ijrias.v5i9.555>
- Sprakit, S. (2011). Challenges of women entrepreneurs in Nigeria. Retrieved from http://en.wikipedia.org/wiki/Agriculture_in_Nigeria
- Takanne, T. (2007). Diversities and disparities among female-headed households in rural Malawi. *IDE Discussion Paper No. 124*.
- World Bank. (2013). *Economic report*. Retrieved February 12, 2014, from <http://www.worldbank.org/ng>
- Zahoor Hussain Javed, & Asif, A. (2011). Female households and poverty: A case study of Faisalabad District. *International Journal of Peace and Development Studies*, 2(2), 37–44. Retrieved from <http://www.academicjournals.org/IJPDS>