A Study on the Quality of Life among the Kollimalai Tribes in Namakkal District

S.Nagalakshmi[1*] & Dr. R.Saravanan[2]

[1]Ph.D., Research Scholar, PG & Research Department of Economics, Urumu Dhanalakshmi College, Tiruchirappalli.
[2]Assistant Professor, PG & Research Department of Economics, Urumu Dhanalakshmi College, Tiruchirappalli.

[*]Corresponding Author: nagaselvam09@gmail.com

Abstract

Quality of Life refers to the perceived well-being of individuals or communities, consisting of physical, psychological, social, environmental, and economic dimensions. It helps policymakers understand living conditions and identify areas requiring development. The study of Quality of Life is critical because it gives a comprehensive assessment of the impact of societal conditions, policies, and health interventions on human flourishing. In the clinical setting, it turns the focus away from simply prolonging life and toward enhancing patients' well-being.

Keywords: Quality of Life, Economic Dimensions, Policymakers, Clinical Setting, Human Flourishing.

Introduction

In social and developmental research, quality-of-life data is critical for identifying underserved populations and devising focused treatments that are actually responsive to communities' complex, perceived needs. Research on the tribes of Kolli Hills highlights significant challenges arising from inadequate access to education, healthcare, and employment, compounded by environmental stressors. Although the community exhibits strong resilience rooted in traditional knowledge, persistent issues - including land alienation, low income, and deficient infrastructure - impede their socio-economic development. Strengthening education and healthcare services, promoting eco-friendly livelihood strategies, and upgrading infrastructure are vital for enhancing their quality of life.

Statement of the Problem

The socio-economic and environmental conditions significantly affect the quality of life of the scheduled tribes in the study area. Female literacy rates among the tribes are relatively low. Health facilities available to them are inadequate, and a majority faces health issues due to malnutrition, lack of hygiene, unsafe drinking water, and poor environmental sanitation. Additionally, social factors, traditional beliefs, and customs further influence their living conditions. Collectively, these factors contribute to a poor overall quality of life for the tribal communities. This study looks on the many aspects of the Kollimalai Tribes' Quality of Life (QoL) in Tamil Nadu's Namakkal District. The remote mountain area known as the Kollimalai Hills is home to indigenous populations whose distinct socioeconomic and cultural landscape makes a strong argument for targeted study.

Objective of the Study

There are three specific objectives such as,

- To examine the influence of socio-economic and environmental conditions on the quality of life of the Kollimalai tribal communities.

- To assess the livelihood opportunities available to the tribes in the study area.
- To identify the major problems faced by the Kollimalai tribes and to propose suitable recommendations for their improvement.

Methodology

This empirical study examines how socio-economic and environmental factors influence the Quality of Life (QoL) of the Kollimalai Tribes in Namakkal District, employing a survey approach to gather primary data through a pre-tested interview schedule from a convenience sample of 100 participants. The collected data will be organized into master and sub-tables, with analysis conducted using Percentage Analysis to illustrate the distribution of responses, alongside the Garrett Ranking Method to assess the relative significance of various factors as perceived by the tribal community.

Study Area

The Kolli Hills are a 503 sq. km range in Tamil Nadu's Eastern Ghats, situated in the Namakkal district between 180 m and 1415 m above sea level. The region is predominantly home to the 'Malayalis' tribe (hill-dwellers), who made up 94.8% of the population in 1991. The tribe, currently numbering over 34,000, resides in mud-walled, thatched-roof houses located on elevated rocky areas. Their main livelihoods are agriculture and cattle rearing. Traditional crops include paddy, tapioca, various millets, beans, and fruits such as jackfruit and pineapple. Historically known for utilizing forest produce and cultivating spices like coffee and black pepper, the community is now shifting from subsistence farming to commercial agriculture, despite ongoing infrastructure and development challenges.

Table 1: Tribal Population in Kolli Hills

Sl. No	Panchayat villages	Tribes	Population	Percentage (%)
1.	Peraikkarainadu	Kolasamy	1496	3.77
2.	Bailnadu	Perandai	4572	11.51
3.	Chiturnadu	Vellaiadai	1631	4.11
4.	Edapulinadu	Sakkaravarthi	2309	5.81
5.	Thirupulinadu	Thoondiyan,Silambai	2399	6.04
6.	Alathurnadu	Kolapandi	828	2.08
7.	Gundaninadu	Kolapandi	1169	2.94
8.	Gundurnadu	Pettiyan,Sakkaravarthi	3810	9.59
9.	Valappurnadu	Sakkaravarthi	4608	11.60
10.	Ariyurnadu	Karuvada,Kolapandi	4683	11.79
11.	Valavanthinadu	Valanjan,Sakkaravarthi	4347	10.95
12.	Thinnanurnadu	Sakkaravarthi	2537	6.39
13.	Devanurnadu	Kanthan,Sakkaravarthi	2310	5.82
14.	Selurnadu	Kalithalaiya	3017	7.60
	Total		39,716	100

Source: Statistical Hand Book

The study area, Kolli Hills, spans 371.30 sq. km, extending 29 km from north to south and 19 km from east to west. The region is predominantly inhabited by Scheduled Tribes, who form the major focus of this research. Out of the total population of 40,479, an overwhelming 95 percent-amounting to 39,716 individuals—belong to tribal communities. This high concentration of tribal population provides a significant context for analysing socio-economic conditions, cultural patterns, and developmental challenges within the region.

Literate Population

As per the census hand book 2011, census of tamilnadu, showing the literate population of the kolli hill with 16 revenue villages. The total literate population is 21073, the male Population is 12240 and Female population is 8833. The highest literate population is Valavanthinadu, Ariyurnadu,Valapuranadu, and Bailnadu, the lowest Literate population is Adakkampudukombai and Pelappadinadu. The moderate literate population is located in Thirupulinadu, chithurnadu and Periaikkarinadu.

S.Nagalakshmi & Dr. R.Saravanan: A Study on the Quality of Life among the Kollimalai Tribes....

Table 2: Literate Population in Kolli hills, Namakkal district

Literate Population - Kolli Hills			
Name	**Male**	**Female**	**Population**
Peraikkarinadu	343	259	602
Bailnadu	1173	715	1888
Chithurnadu	471	294	765
Edappulinadu	601	453	1054
Thiruppulinadu	552	387	939
Pelappadinadu	108	63	171
Alathurnadu	253	160	413
Gundaninadu	321	147	468
Adakkampudukombai	66	53	119
Gundurnadu	1014	708	1722
Valappurnadu	1399	1058	2457
Ariyurnadu	1568	1213	2781
Valavanthinadu	1672	1348	3020
Thinnanurnadu	955	714	1669
Devanurnadu	674	489	1163
Selurnadu	1070	772	1842
Total	**12240**	**8833**	**21073**

Source: Census of India 2011

The above table showing the literate population in and around of the kolli hill (Census 2011). Its showing the literate status in the study area like Valavanthinadu, Ariyurnadu and Valappurnadu. The most of the literate villages located mean centre of the study area with good accessible transport with road network. The infrastructure and schooling facilities is available valavanthinadu, Valappurnadu, Bailnadu, and Selurnadu. The Educational points are available wherever possible the easy transport facilities with over population

The study investigates the quality of life of the Kollimalai tribes through socio-economic, demographic, cultural, and environmental indicators shows the bellow table.

Table 2: Socio-Economic Profile of Respondents

SI No	Socio-Economic Profile	Indicators	Number of Respondents (%)
1	**Gender (M/F)**	Male	34
		Female	66
2	**Age (Years)**	Less than 25	18
		25to50	38
		50 to 60	29
		More than 60	15
3	**Marital Status**	Married	59
		Unmarried	30
		Widow/widower	11
4	**Type of Family**	Nuclear	36
		Joint	64
5	**Educational status**	Illiterate	26
		Primary school	28
		High school	23
		Higher secondary	11
		Collegiate	12
6	**Occupation**	Farmer cum Agriculture workers	40
		Agriculture workers/ forest activities	47
		Non-Agriculture workers	13

7	Type of House	Kachcha	49
		Semi-Pucca	23
		Pucca	28
8	Size of land holding (Area)	Small (less than 2.5 Acre)	27
		Medium (2.5 Acre to 5 Acre)	61
		Large (more than 5 Acre)	12
9	Annual Income	Upto- 25000	26
		25001-50000	49
		50001-75000	16
		75000 above	09
10	Annual Expenditure	Upto- 15000	55
		15001-25000	23
		25001-3500	15
		35000 above	7

Source: primary data

The Table No.3 reveals that thecollected primary data reflects the living standards and lifestyle patterns of the tribal population.

The survey highlights that women respondents constitute a majority (66%), indicating the active participation of females in community decision-making and household responsibilities. Most respondents (67%) fall within the productive age group of 25–60 years, revealing a strong and capable workforce. In terms of marital status, 59% are married, signifying stable family structures.

Family composition data reveals that joint families (64%) are more common than nuclear families, demonstrating the prevalence of traditional kinship systems and social bonding among tribal households.

With regard to education, although 26% are illiterate, there is a gradual increase in access to schooling, as a considerable section has completed primary (28%) and high school (23%) levels. However, college-level education remains limited (12%), suggesting restricted access to higher education facilities in hilly and remote regions.

Occupational characteristics show that the majority are involved in primary sector activities— Agriculture and forest-based work (87%), indicating dependency on natural resources for livelihood. Land ownership status reveals that most respondents (89%) possess medium-sized land holdings, which supports agricultural sustainability.

Income distribution shows that 49% fall within the annual income range of ₹25,001–₹50,000, reflecting modest economic stability, though 26% still belong to the low-income category. Expenditure patterns also indicate that a majority (55%) spend less than ₹15,000 annually, which correlates with their limited earnings and simple lifestyle.

Table 4: Distributions of Respondents by Information related to home surrounding

Sl. No	Information related to home surrounding	
	Particulars	**Number of Respondents (%)**
1	**Main source of drinking water**	
	Piped water in home	11 (11)
	Ground water in home	23 (23)
	Public well	45 (45)
	Well water in home	21 (21)
	Total	100
2	**Distance of water source from shelter**	
	Less than 100 feet	62 (62)
	>100 feet	38 (38)
	Total	100

3	**Water Treatment**	
	Boiling	22 (22)
	Filtering	20 (20)
	Other	6 (6)
	None	52 (52)
	Total	100
4	**Members of household (Nutrition)**	
	Vegetarian	75 (75)
	Non-vegetarian	25(25)
	Total	100
5	**House clean (at least once a week)**	
	Yes	51 (51)
	No	49(49)
	Total	100
6	**Type of Bathroom**	
	Separate	6(6)
	Shared	64(64)
	Common	30(30)
	Total	100
7	**Type of Toilet**	
	Separate	7(7)
	Shared	54(54)
	Common	39 (39)
	Total	100
8	**Kids defecation practice**	
	Toilet	42(42)
	Outside	58(58)
	Total	100
9	**Method of waste Storage**	
	Open vessel	73(73)
	Closed vessel	27(27)
	Total	100
10	**Drainage**	
	Open	52(52)
	Common	35(35)
	Pucca	8(8)
	Other	5(5)
	Total	100

Source: Primary data

From the table 4 Consist of 10 items on distributions of respondents by information related to home surrounding in the study area.

- Main source of drinking water: Majority of the respondent (45 %) have used for Public well.

- Distance of water source from shelter: majority (68%) had water source available within 100 feet distance in the household.

- Water Treatment: The study found that majority (52%) of the respondent had none of the Water Treatment.

- Members of household (Nutrition): (75%) high level of Members of household belongs to Vegetarian.

- House clean (at least once a week): Reveals that out of the total number of respondents had House cleaned at least once a week (51%).

- Type of Bathroom: Among the Majority of respondent (64%) belongs to Shared Bathroom in the household.

- Type of Toilet: Majority of the respondent are (54%) had Shared latrines in their house

- Kids defecation practice: Most of them (58%) had Outside Kids defecation in the household.

- Method of waste Storage: Majority of the respondent are (73%) Method of waste Storage belongs to open vessel daily.

- Drainage: Majority of them (52%) used open drainage method for waste water disposal.

Quality of Life Improved Tribal Population

The study for Socio-economic and environmental conditions in and around Pachamalai hills. The major focus for the quality of life improved tribal population among the Pachamalai hills. The basic problems of tribal community Scale value as per Garrett's Ranking Technique for first to ten ranks is Lack of Education, Low level income, Inadequate transport facilities, Land degradation, Absence of safe drinking water, Lack of access to health care facilities, Poor hygiene (sanitation), Lack of electricity, Personal habits, Malnutrition (Poverty and consequent under nutrition) respectively. The percentage position of each rank is made in to score by referring problems is summed up for assigning rank. Table 8 disclose the ranking analysis for the Basic problems faced by the Kollimalai Tribesin the study area.

The application of Garret"s ranking technique indicated that long distance was the major problem in tribal population. The responses were converted to numerical scores using Garrett technique which is highly advantageous. The Garrett's score conversion formula is [1] Percent position = 100 (Rij - 0.5)/Nij

- Rij – Rank given for the ith variable by the jth respondents

- Nij – Number of variable ranked by jth respondents

From the following table shows that basic problems faced by the **Kollimalai Tribes should be apply** Garrett's Ranking Analysis.

Table 5: presents the ranking given by the respondents towards the problems pertaining to Kollimalai Tribes in the study area.

Sl.No	Factors	Rank rendered by the Respondents									
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1	F1	10	3	9	14	7	5	9	10	11	15
2	F2	7	13	7	3	11	13	3	13	12	4
3	F3	5	3	5	4	3	5	5	2	6	2
4	F4	8	10	11	6	4	7	9	11	4	3
5	F5	13	17	14	13	11	15	14	5	12	14
6	F6	12	4	8	15	17	11	9	8	13	3
7	F7	19	10	15	11	17	16	12	7	9	14
8	F8	3	8	8	4	10	4	13	17	12	9
9	F9	11	13	10	11	14	15	9	15	13	11
10	F10	12	19	13	19	6	9	17	12	8	25

Source: primary data

Table 6: Garrett Score

Sl.No	Percent position	Calculated Value	Garrett Value
1	100(1-0.5)/10	5	81
2	100(2-0.5)/10	15	70
3	100(3-0.5)/10	25	63
4	100(4-0.5)/10	35	57
5	100(5-0.5)/10	45	52
6	100(6-0.5)/10	55	47
7	100(7-0.5)/10	65	42

8	100(8-0.5)/10	75	36
9	100(9-0.5)/10	85	29
10	100(10-0.5)/10	95	18

Source: primary data

Table 7: Computation of the Garrett's Value

Factor	Rank rendered by the Respondents									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
F1	810	210	567	798	364	235	378	360	319	270
F2	567	910	441	171	572	611	126	468	348	72
F3	405	210	315	228	156	235	210	72	174	36
F4	648	700	693	342	208	329	378	396	116	54
F5	1053	1190	882	741	572	705	588	180	348	252
F6	972	280	504	855	884	517	378	288	377	54
F7	1539	700	945	627	884	752	504	252	261	252
F8	243	560	504	228	520	188	546	612	348	162
F9	891	910	630	627	728	705	378	540	377	198
F10	972	1330	819	1083	312	423	42	432	232	450

Source: primary data

Table 8: Ranking of Kollimalai Tribes basic Problems

Factor	Particulars	Total Score	Mean Score	Rank
F1	Lack of access to health care facilities	4311	43.11	VI
F2	Low level income	4286	42.86	VII
F3	Inadequate transport facilities	2041	20.41	X
F4	Land degradation	3864	38.64	IX
F5	Absence of safe drinking water	6511	65.11	II
F6	Lack of Education	5109	51.09	V
F7	Poor hygiene (sanitation)	6716	67.16	I
F8	Lack of electricity	3911	39.11	VIII
F9	Personal habits	5984	59.84	IV
F10	Malnutrition (Poverty and consequent under nutrition)	6095	60.95	III

Source: primary data

From the above table reveals the basic problems faced by the sample respondents for Kollimalai Tribes in the study area. The sample respondents were requested to rank the Kollimalai Tribes according to their opinion. Indirect weigtment is ranked as poor hygiene (sanitation) problem by the majority of the sample respondents with mean score of (67.16), absence of safe drinking water ranked as second problem with mean score of (65.11), malnutrition (poverty and consequent under nutrition) ranked as third problem with mean score of (60.95), inadequate transport facilities is least Kollimalai Tribes problem to sample respondents with score of 20.41.

Conclusion

The conclusion of the present study for educational status of the schooling and other educations in and around of the kolli hills. The major focus for the literate and Illiterate population among the 16 villages in the kolli hills. The highest literate population is Bailnadu, Valavanthinadu, Valappurnadu, Gundarnadu and Ariyurnadu, the male literate population is high and low in Female population. The location is come under the potential resources and Physiography in nature occupied forest, soil, water and agriculture engaged to tribal's. Hence, it is concluded that poor hygiene is a major and fundamental problem faced by the Kollimalai Tribes in the study area.The government implementing the so many social awareness programe by NGO's. The NGO's also role to counseling to tribal communities for school going children , women's and youths.

References

1. **Mathur, H. M. (2011)**"Tribal Development in India: Land and Livelihood", New Delhi: Routledge India.

2. **Bose, B. (2017)**"Socio-Economic Conditions of Tribals in India: A Case Study of Tamil Nadu", International Journal of Research in Economics and Social Sciences, Vol 7(6), pp:45-55.

3. **Rajendran, K. & Geetha, R. (2014)**"Livelihood Status and Problems of Tribals in Kolli Hills, Tamil Nadu", Indian Journal of Applied Research, 4(3), pp: 120-124.

4. **Ramakrishnan, P. S. (2015)**"Traditional Ecological Knowledge in Rural and Tribal Communities of India", New Delhi: Ministry of Environment and Forests.

5. **Muniyandi, S., &Jesurajan, B. (2019)**"Healthcare Access and Health Problems among Tribal Population in Tamil Nadu", Journal of Rural Development, Vol 38(4), pp: 512-528.

6. **Nair, R. (2013)**"Educational Attainment among Scheduled Tribes in India: Issues and Challenges", Journal of Educational Planning and Administration, Vol 27(2), pp: 125-140.

7. **Ramesh, K. & Poongothai, S. (2020)**"Quality of Life among Tribes in Eastern Ghats of Tamil Nadu",EPRA International Journal of Research and Development, Vol 5(8), pp: 60-66.

8. **Census of India (2011)** District Census Handbook – Namakkal. Office of the Registrar General and Census Commissioner, Government of India.

9. **Planning Commission (2014)** Report of the Expert Group on Tribal Development. Government of India, New Delhi.

10. **Sundar, N. (2016)** The Scheduled Tribes in India: Development, Deprivation and Discontent. New Delhi: Oxford University Press.

❑❑❑