ISSUES AND DIFFICULTIES IN THE ERODE DISTRICT: SOCIO-ECONOMIC AND CULTURAL IMPACT OF INADEQUATE

SANITATION ON HUMAN HEALTH

*Dr.K.Kannan, Assistant Professor in Economics, Department of Commerce Professional Accounting, Sree Saraswathi Thyagaraja College, (Autonomous) Pollachi-642107, Cell: 09578779766, E.Mail: karuppusamykannan@gmail.com

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ABSTRACT

This study focuses on an empirical examination of the socioeconomic effects of poor sanitation on problems with and threats to human health in the district of Erode.The fact that policymakers and the general public have not fully grasped the significance of the improved sanitation solutions is one of the factors contributing to the poor progress in extending the coverage of better sanitation in the world in general and in developing nations in particular. Improved sanitation is not typically seen by governments in developing nations as a requirement for economic growth or as a source of increased welfare, and cost-benefit analyses have not been frequently used to support greater funding for sanitation projects. This study intends to report and debate the most recent data on the economic implications of sanitation by compiling pertinent research findings. In the Erode district, these factors include the financial effects of inadequate sanitation, lost opportunity costs, lost man hours, and willingness to pay for better sanitation options.

KEY WORDS: Coverage of sanitation, economic development, environmental protection, and population.

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1.1 OVERVIEW OF THE STUDY

This study was examined to provide an empirical analysis of the degree to which poverty has exposed people to danger and uncertainty in their lives. Therefore, it is crucial to comprehend the effects of poor sanitation on health. In this setting, the current study was created to evaluate the social harm caused by poor sanitation and how it affects the poor's quality of life, employment health, and income. These problem-solving strategies must take into account the socioeconomic and environmental components of poor sanitation and how it affects human health because they alone cannot solve any environmental issues. Environmental issues and inadequate sanitization issues may be resolved comprehensively with the aid of the solution.

1.2 PURPOSE OF THE STUDY

To provide an empirical analysis of the extent to which poverty has exposed people to risk and uncertainty in their lives, this study was looked at. Therefore, it is vital to understand how poor sanitation affects one's health. The current study was designed in this context to assess the social harm caused by poor sanitation and how it impacts the poor's standard of living, state of their employment, and level of income. Since they cannot resolve any environmental problems on their own, these problem-solving techniques must take into account the social and environmental aspects of poor sanitation and how it affects human health. With the help of the solution, environmental problems and inadequate sanitization problems may be completely handled.

1.3 OBJECTIVES OF THE STUDY

- ❖ To examine the socioeconomic aspects of the research area.
- ❖ To determine the cultural effects of inadequate sanitation on people's health in Tamilnadu's Erode district.
- ❖ To analyze problems and obstacles in the research area.

1.3.1. HYPOTHESIS

Based on the objectives and parameters of the study, the following null hypotheses have been developed and tested. Those are: Ho: Area of family income, the number of women, education, employment status, and income are the factors that affect a family's willingness to pay for a sanitary facility.

1.4 RESEARCH METHODLOGY

Both primary data and secondary data are employed in the study. 609 homes provided the primary source data, which were gathered using an interview schedule approach. The interview schedule is set up so that the respondents may comprehend properly and express their thoughts freely and honestly in order to acquire primary data.an evaluation of the environmental, cultural, socioeconomic, and institutional factors. In order to determine whether there is a statistically significant association between family income and any other variables, regression and the Chi-Square test were utilized.

1.5 SOURCES OF DATA AND STATISTICAL TOOLS

On both primary data and secondary data, the study is used. Using an interview schedule method, the primary data were gathered from 609 households. The interview schedule was created with the intention of gathering primary data so that the respondents may

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express their ideas freely and honestly.an evaluation of the institutional, socioeconomic, cultural, and environmental factors. Regression analysis and the Chi-Square test are used to determine whether there is a relationship between family income and that relationship that is statistically significant.

1.6 REVIEW OF LITERATURE

According to the "Report of the Working Group on Rural Domestic Water and Sanitation" from the Twelfth Five Year Plan (2012-2017), TSC is a demand-driven, community-led project-based program that treats a district as a unit. The effort is being carried out in 607 rural areas around the nation. Past performance over the past ten years has led to continued advancements in sanitation access, increased focus on toilet usage and support of hygienic behavior change, safe conveyance and disposal of harsh environments at the community level, and benefits of improved health, personal hygiene, and environmental sanitation. In his 2011 article "Health and environmental sanitation in India: Issues for prioritizing control strategies," Ganesh Kumar S.Environmental sanitation aims to improve community health by providing environmental cleanliness and ending the cycle of sickness. Innovative and suitable technologies in accordance with community needs, national socioeconomic development, cultural aspects of environmental sanitation, political commitment, capacity building of the relevant sectors, social factors, including community behavior patterns, legislative actions taken, and others.

1.7 ANALYSIS AND DISCUSSION

The research survey is conducted in order to analyze the various factors.

TABLE:1.7.1
DETAILS OF RESPONDENTS

S.no	Gender	Frequency	Percent
1	Male	441	72.40%
2	Female	168	27.60%
	Total	609	100%

S.no	Age	Frequency	Percent
1	14<25	54	8.90%
2	25<35	99	16.30%
3	36years<50	310	50.90%
4	Above51	146	24.00%
	Total	609	100.00%

S.no	Educational Status	Frequency	Percent
1	Illiterate	101	16.60%
2	Primary	63	10.30%
3	Middle	187	30.70%
4	Higher& Higher Secondary	203	33.30%
5	Degree &Postgraduate/Professional	55	9.00%
	Total	609	100.00%

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S.no	Occupation	Frequency	Percent
1	Farmer	36	5.90%
2	Non-Farmer	192	31.50%
3	Government employee	37	6.10%
4	Private	132	21.70%
5	Others	168	27.60%
6	None	44	7.20%
	Total	609	100.00%

Source: Computed From Primary survey 2022

Table shows that Out of the 609 (at 20% significant level) sample household respondents' 441 (72.4 percent) males, 168 (27.6 percent) females are the sample household respondents of the study area. Out of 609 household sample respondents, age was 14< 25, 54 respondents (8.09 percent), 26<35 age of the respondents 99 (16.3 percent) and 35 < 50 age of the respondents 310 (50.9 percent) and 146 respondents age was above 50, (24.0 percent). The above table elaborates that the details regarding the education pattern of respondents. In classified villages, most of the respondents are having middle school level education 187 (30.7 percent) followed by 144 (23.4 percentage) respondent are possessing Higher school level education, further 101 (16.6 percentage) respondents are illiterates and 63 (10.3 percentage) respondents having finished the primary level of education. The majority of the 192 respondents (31.5%) worked as non-farm workers, and the remaining 168 respondents (27.6%) were employed in jobs like driver, tailor, and student. Private employers were ranked second with 132 respondents (21.7%), and respondents with no employers were ranked third with 44 respondents (7.2%). In the studied areas, 37 respondents (6.1%) work for the government. Finally, 36 respondents (5.9%) worked as farm laborers.

Functions: Y = a ± bx

$$Y = a \pm \beta_1 X_1 \pm \beta_2 X_2 \pm \beta_3 X_3 \pm \beta_4 X_4 \pm \beta_5 X_5 \pm \beta_6 X_6 \pm \beta_7 X_7 \pm \beta_8 X_8 \pm \beta_9 X_9 \pm \beta_{10} X_{10} \ldots \ldots \pm \beta_n X_n \pm \mu$$

To understand the respondents' per capita income in the chosen study villages, regression analysis of variance was employed. The ANOVA test has demonstrated that there are differences in respondents' per capita income. To test these discrepancies, a regression test is used specifically. These tests were divided into a number of areas. The outcome suggests that the selected villages' R Value.980a, R Square Value.960, Adjusted R Square.959, and Sig value.000b are generating money from various types of employment. The ANOVA result indicates that the variation between the two groups differs significantly.

Out of 609 homes, 208 respondents (34.1%) reported having a household income of Rs. 15000, while 194 respondents (31.8%) reported having a household income of Rs. 15001 and Rs. 30000. Out of 609 houses with respondents, 531 (87.2%) are nuclear families, and the remaining 78 (12.8%) are joint families. This table makes it evident that there are fewer respondents from nuclear families than from combined families. Taking into account that 85 respondents (14.0 percent) were single and 524 respondents (86.0 percent) were married out of the 609 sample respondents. The p-value (0.001) from the chi-square test is less than 0.01 and the result is significant at the 1% level. As a result, the alternative hypothesis was accepted and the null hypothesis was rejected. The investigation

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found that factors including monthly household income, home size, family makeup, and marital status.

TABLE:1.7.2

DETAILS OF INCOME OF THE RESPONDENTS

S.no	Monthly household income(Rs.)	Frequency	Percent
1	UptoRs.15,000	208	34.1
2	Rs.15,001-Rs. 30,000	194	31.8
3	Rs.30,001-Rs.60,000	168	27.5
4	Above Rs. 60,000	39	5.6
	Total	609	100

S.no	Family Structure	Frequency	Percent
1	Nuclear family	78	12.80%
2	Joint family	531	87.20%
	Total	609	100

S.no	Marital status	Frequency	Percent
1	Married	524	86.00%
2	Unmarried	85	14.00%
	Total	609	100.00%

Source: Computed From Primary survey 2022

The majority of the 527 respondents (86.5%) in this study and their family members were willing to pay for decent restroom facilities, as seen in the above table. The remaining 82 responders (13.5%) and their families did not pay for that. The percentages of respondents who were affected by the diseases caused by poor sanitation are shown. It is clear that the respondents are impacted by water-borne illnesses, particularly poor sanitation. For instance, water-borne infections harm 79 children. Men 4 who were afflicted by the poor sanitation came next. When compared to men, the 15 women are also suffering from water borne illnesses to a larger extent. Due to poor sanitation, both male and female family members, 4 and 5, respectively, were impacted. Because, Due to poor sanitation, children's mortality and morbidity are affected. Consuming unsafe water is harmful to human health since, generally speaking, more than 65 percent of illnesses in rural areas are transmitted through the use of water. We asked survey participants about the frequency of water-related health issues brought on by poor sanitation. Water-borne illnesses such diarrhea, cholera, typhoid, gastroenteritis, and jaundice were reported by respondents. It is because using a contaminated water source and having inadequate facilities might lead to health problems.

Health Damage Cost Function: $Y = a \pm bx$

$HDC = a \pm \beta 1X 1 \pm \beta 2X 2 \pm \beta 3X 3 \pm \beta 4X 4 \pm \beta 5X 5 \pm \beta 6X 6 \pm \ldots \ldots \pm \mu$

Where, Y =Loss of Total Expenditure

   a = Constants (-.586)

$\beta 1X 1$= Where do you take treatment (-.350)

$\beta 2X 2$= Distance (.652)

$\beta 3X 3$= Types of medicine (1.213)

β 4X 4±= types of disease (-.125)
β 5X 5= Persons suffers the most from these illnesses (.027)
β 6X 6= age of the person (-.149)
µ= Error term (.18413)

The respondents in the chosen study villages employ regression analysis of variance to comprehend the health damage cost function. The results of the ANOVA test show that respondents' overall health spending varied. To test these discrepancies, a regression test is used specifically. This test is divided into several categories. The outcome suggests that the selected villages' R Value.969a, R Square Value.938, Adjusted R Square.938 and Sig value.000b are affected by a variety of diseases.

1.8 SUGGESTIONS AND POLICY IMPLICATIONS

❖ According to the current study, there is an ever-increasingly rapid population increase, industrialization, modernization, technical progress, cultural development, migration, level of education, medical infrastructure, and other factors. However, the rural population continues to openly defect in public and open places. Additionally, there is a lack of suitable restrooms, closed drainage, and solid waste disposal. This could have an impact on human health and lead to diseases.

❖ The government should take the necessary actions to prevent and control diseases that affect human health. Additionally, it raises the level of living for rural residents.

❖ The government should create initiatives to teach people in rural areas about the need of cleanliness, according to the study's major suggestion. Basic utilities including toilets, drainage systems, solid waste management, sources of clean drinking water, and the prevention of open defecation in rural regions should be prioritized by policymakers. When working in fields, scavengers must wear the proper mask and hand gloves.

❖ The decision-maker should educate rural residents on the importance of hand washing with soap after defection and proper child waste disposal. Avoid dumping biodegradable and non-biodegradable waste in public locations, especially near schools, open drainage areas, and water collection areas (such as public stand posts, rivers, channels, and open wells).

CONCLUSION

The findings of this study have implications for the calculation of how India's water supply and sanitation coverage might be improved, as well as for the distribution of funds and the implementation of basic amenities in rural regions. The government should take the required actions to attain 100 percent coverage of rural water supply and sanitation. Sanitation management also includes promoting neighborhood companies and groups that use ethical practices as well as informing residents, particularly young people. To protect the sanitation, the government must take action. This study makes it clear that improving water resource management and sanitation control are crucial for the future.

REFERENCE

➤ **AbosedeBabatunde (2010**) *"The Impact of Oil Exploitation on the Socio-Economic Life of the Ilaje-Ugbo People of Ondo State, Nigeria"* Journal of Sustainable Development in Africa (Volume 12, No.5, 2010), ISSN: 1520-5509, Clarion University of Pennsylvania, Clarion, Pennsylvania, and Pp 61-84.

➤ **Addis Ababa (2007)**"*Water Supply and Sanitation Policy for Sierra Leone"* United Nation Economic Commission for Africa, Pp 1-130.

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➢ **Caroline A. Sullivan and Alasdair Cohen. (et al 2003)***"The Rural Water Livelihoods Index"* Working paper, Pp 1-59.

➢ **Carolyn Hannan and Ingvar Andersson***"Gender perspectives on water supply and sanitation: Towards a sustainable livelihoods and ecosystem-based approach to sanitation"* Word Document, Pp 1-8.

➢ **Chandrasekhar. S (2000***) "Willingness to Contribute to Public Projects – Evidence from India"* Pp 1-49.

➢ **Chandy. K. T.** *"Rural Sanitation and Health"*Booklet No. 416 Health and Medicine: HMS – 2, Pp1-9.

➢ **K.Kannan and Dr.S Ponnarasu (2013***)"Rural Water Supply and Sanitation Coverage in India at Current Scenario"* ZENITH International Journal of Business Economics & Management Research ISSN 2249-8826ZIJBEMR, Vol.3 (9), September (2013) Online available at zenithresearch.org.in Pp. 73-83.

➢ **Kannan and Dr.S Ponnarasu (2013)** *"Emerging Issues: Health and Environmental Impact of Poor Sanitation in Rural India"* International Journal of Environmental Science and Technology, Powered by Editorial Manager® and Preprint Manager® from Aries Systems Corporation Pp: 1-9.

➢ **Kurukshetra (2009)** *"Rural Sanitation in India"* A Journal on Rural Development Kurukshetra, Vol 57, No 5, March 2009, Pp 39-40.

➢ **Maduhri N.V, P.Sikligar (2008)***"Rural sanitation policies and strategies"* Rural Infrastructure Sanitation, Book Published by Sarup& Sons New Delhi, Pp 9-19.

➢ **Mahananda B. Chittawadagi (2012***) "Socio-economic impact of Poor Sanitation and Housing of Urban slum Dwellers: A case of Bangalore City"* Southern Economist, Volume 50, No 19, Feb 2012, Pp 37-43.