

<https://doi.org/10.33472/AFJBS.6.Si2.2024.10-21>



African Journal of Biological Sciences

Journal homepage: <http://www.afjbs.com>



Research Paper

Open Access

ENVIRONMENTAL IMPLICATIONS OF SLUM DWELLERS- A CORRELATION OF METRO AND NON –METRO CENTERS IN TAMIL NADU

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Article History

Volume 6, Issue Si2, 2024

Received: 19 Feb 2024

Accepted : 06 Mar 2024

doi: 10.33472/AFJBS.6.Si2.2024.10-21

Abstract

The number of the urban poor is also growing and a significant number of these poor find spaces in slums and continue to struggle for better living standards. Improving their conditions appeal to significant efforts from the governments for better policy designs. However, better policy design requires understanding the commonalities and differences across slums within and between cities. This study was conducted on the living conditions of slums in of Metro and Non –Metro Centers in Tamil Nadu. To find characteristics, such as large average household size, poor housing quality, the living near places for the sewer, low female labour market participation and high school enrolment rates among children, to be common across. This study details in of Metro and Non –Metro Centers in Tamil Nadu. To bring out considerable heterogeneity among different groups within slums of each city concerning living standards, like drainages, sanitation, drinking water, medical, literacy rates and consumption pattern, Overall, to find that slums in of Metro and Non –Metro Centers in Tamil Nadu

Key words: Pandemic, Economic Conditions, Demographic Factor and Slum Dwellers

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INTRODUCTION

Slums dwellers are vulnerable parts of society. They are facing various types of problems like health and hygiene-related problems, low level of income, poor housing conditions, and lack of social amenities. Unhealthy living conditions of slum dwellers are the result of a lack of essential services, with visible, open sewers, lack of pathways, uncontrolled dumping of waste, polluted environments, and unorganized building constructions, etc. The existence of slum is a global phenomenon. Some social scientist said that slum is the by-product of the modern era. The development of the city is significant, but the provision for the slums population is needful. There is a need to develop the plans and policies for the up gradation of the slum dwellers in terms of infrastructural development and basic amenities. Slums are increasingly faced with negative consequences such as the polarization of population in large cities, high density, slums, and squatter settlements, acute shortage of housing and basic civic amenities, degradation of the environment, traffic congestion, pollution, poverty, unemployment, crime, and social unrest.

IMPORTANCE OF THE STUDY

There is a fundamental change in the government policy to provide and support by slum dwellers from the traditional ways to modern ways, as seen in the late 1991's. This change has shown the way of economics status to provide the lifestyles of slum dwellers. The various dimensions adopted by the social economics conditions to regular involved in slum dwellers. The number of people has affected by lack of socio amenities, hygiene, health resources, and proper education. Few have gone into the extremes and loss of life even. It is all because of our limited lifestyle about safety and security. Conclude that everything depends on the lifestyle of attraction. The slum dwellers among the socio-economic conditions and its impacts lifestyle of slum dwellers are not an exception to this for the balanced development of the nation; it is highly essential to analyses the slum socio-economic conditions of dwellers. This study has undertaken the objective of offering suitable solutions to solve the problem of slum dwellers. This is the main reason behind the researcher for choosing the research topic as socio-economic conditions of slums in Chennai City.

REVIEW OF THE STUDY

Brijendra Nath Singh; (2016)- Based on the above facts, we can say that the socio-economic conditions of the slum dwellers are deficient. There is a lack of basic amenities in the slum areas. They are facing various types of problems in daily life. Housing conditions of the slums areas is deplorable. They lived in the dilapidated housing structures, lack of cross-ventilation; lack of lighting sources affects the health of the slum dwellers. This study focuses on slums related problems. The educational level of the slum dwellers is deficient; there is a need to educate the slum children.

Sufaira.C(2013) The rapid growth of population in urban centers since independence has led to the emergence and growth of urban slums in the country. The developmental activities in urban centers employ the rural migrants as well as the local urban population. These low-income groups, in the absence of proper shelter, were settled in pockets of the slum areas

Dr. A. Royal Edward Williams / Afr.J.Bio.Sc. 6(Si2) (2024) 1-9

characterized by overcrowding, dilapidated dwellings, lack of sanitation and civic amenities. Realizing the gravity of the situation, governments have implemented several schemes and programs to improve the living conditions of people living in slums. Our study has shown that in the notified area, conditions of slum dwellers are better than that of non-notified area. In the non-notified area, health and living conditions are continuing to be very poor and disgusting. In short multipronged strategy required not only to address the needs of slum dwellers for shelter but also the problems of urban poverty, unemployment, low incomes, and lack of access to essential municipal services.

STATEMENT OF THE PROBLEM

There are so many factors that influence by social conditions of slum inhabitants are attributed likes demographic features, infrastructures, and environment. In this modern world, the socio-economic situation is a vital role in human life. Demographic features include population, family size, birth rate, and density of population, education, health conditions, and others. The background of the study is motivated to study the socio-economic status of slum dwellers. Further, the study helps to analyses the various socio- socioeconomic factors and psychological factors which influence the slum dwellers. The slum dwellers approach based on the hypothesis. The study covers the socio-economic condition of the Slum dwellers and its impacts of improvement of lifestyle in Chennai City. This study has undertaken the objective of offering suitable solutions to solve the problem of slum dwellers. This is the main reason behind the researcher for choosing the research topic as socio-economic conditions of slums in Chennai City. This research question asked about society.

1. What are the factors influences by socioeconomic condition for Slum Dwellers?
2. What are the problems and challenges of socio-economic condition for Slum Dwellers?

SCOPE OF THE STUDY

In this context, it is very significant for slum dwellers to be aware of the various factors influences phenomena, and they should identify the ways to overcome while improving the socio-economic status. Due to the challenges of slum dwellers, were subject to fear of knowledge about the socio-economic condition. Therefore, slum dwellers are still facing various problems. Slum dwellers need sanitary and proper education facilities. Hence this study helps to analyses the various factors that influence the socioeconomic condition and their future generation. There is a need to develop the plans and policies for the up gradation of the slum dwellers in terms of infrastructural development. Hence this study is undertaken to gain an insight into the slum dwellers.

OBJECTIVES OF THE STUDY

The following objective given bellows

1. To study on socio-economic conditions of slum dwellers in of Metro and Non –Metro Centers in Tamil Nadu
2. To examine factors influences by socioeconomic status for slum dwellers

HYPOTHESIS OF THE STUDY

1. H_0 = There is no relationship between socio-economic conditions and slum dwellers
2. H_1 = There is a relationship between socio-economic conditions and slum dwellers
3. H_0 = There is no relationship between factors influences and slum dwellers
4. H_1 = There is a relationship between factors influences and slum dwellers

RESEARCH METHODOLOGY

This study is based on socio-economic conditions of slum dwellers, both in analytical and descriptive nature. It depends upon both primary and secondary data. The methodology is the explanation segment which governs the outcome of the research. It encompasses and directs the researcher to research a systematic process which ensures and facilitates the truthfulness of the issues. It deals with the data collected for the study, sources of data, sampling plan of the population of the study, location of the research, instrument used to collect data, method of collecting data, analysis and interpretation of the collected data with different statistical tools in order to find out the strength of the collected data and limitations of the study for the purpose of collecting primary data.

SOURCES OF DATA

The researcher has made use of both primary and secondary sources to fulfill the objectives. The primary data were collected from slum dwellers. In addition to data collected through primary sources, other secondary data were also collected from Government organizations such as an annual report, the secondary data provided by these organizations from there, monthly magazine, newspapers, weekly, yearly reports and bulletin.

SAMPLING PLAN

The population of the selected locations for the research is, and all the respondents could not be interviewed due to practical difficulties. Only selected samples have been taken up for the study. Many slum dwellers were unwilling to disclose their details, especially health condition, occupation, household income, family segment, and different lifestyle pattern. Hence the data were collected from the respondents who were willing to disclose the information. The simple random sampling method is used for the study. To have an illustration from different socio-economic groups, cluster sampling is done to select the respondents. The research was taken by simple random sampling method.

STATISTICAL TOOLS FOR ANALYSIS

This research is based on primary data which were collected from the slum dwellers through the questionnaire. Secondary data are also utilized, which were collected from the published source like books, journals, magazines, and annual reports. The data collected from both sources are scrutinized, edited, and tabulated. The data were analysed using the statistical package for social sciences (IBM-SPSS-21). The following statistical tools are used in the study. Measures of central tendency and measures of dispersion, One-way analysis of variance, K-means cluster analysis. Multiple discriminate analyses, multiple regression analysis, chi-square analysis, and percentage analysis have also been employed.

LOCATION OF THE STUDY

The research adopted a simple random sampling method. The respondents are residents of slum dwellers in Chennai. The age group of 20 years to 65 years, including the different strata of slum dwellers like students, housewife, daily workers, rickshaw drivers, sweepers, and non-registered workers. 720 questionnaires were distributed to the slum dwellers spread over in Chennai City. Among them, 615 questionnaires were collected. In which 15 questionnaires were found incomplete and unusable. Hence, the accurate sample of the study is 600.

LIMITATIONS OF THE STUDY

The study is confined to Metro and Non –Metro Centers in Tamil Nadu, and therefore, the conclusion cannot be comprehensive to the entire universe. The findings, suggestions, and the outcome may apply only to the socioeconomic condition of slum dwellers and its impacts of improvement and not for high-income people. Reliability and validity of the statistical data are obtained from the opinion given by slum dwellers, which may differ from time to time because they improve the economic conditions. The lack of knowledge of slum dwellers about the socio-economy status can be a significant limitation.

Table 1
Values of coefficients - canonical discriminant function

| Slum dwellers' Socio Economic Conditions related factors or variables of Chennai slums | Coefficients values of Canonical Discriminant Function |
|--|--|
| Safety | 0.357 |
| Basic Amenities | 0.312 |
| Threats | -0.045 |
| Economic Status | 0.075 |
| Social Status | 0.231 |
| Personal Satisfaction | -0.052 |
| Constant | -3.005 |

Based on the Canonical Discriminant Function Co efficient of this study, the equation for the model considered should be written as

$$\text{Discriminant Function is calculated as } 0.357 * F1 + 0.312 * F2 - 0.045 * F3 + 0.075 * F4 - 0.231 * F5 - 0.052 * F6 - 3.005(\text{Constant})$$

Table 2
Values of canonical correlation coefficient and wilks' lambda

| Value of Canonical Correlation function | Value of Wilks' Lambda | Value of Chi square | Df | Significance level |
|---|------------------------|---------------------|----|--------------------|
| 0.201 | 0.959 | 24.624** | 6 | Significant |

* Significant at 1% level

Table 3
Table showing pooled within groups matrices value

| Pooled Within-Groups Matrices | | | | | | | |
|-------------------------------|-----------------------|--------|-----------------|---------|-----------------|---------------|-----------------------|
| | | Safety | Basic Amenities | Threats | Economic Status | Social Status | Personal Satisfaction |
| Correlation | Safety | 1.000 | 0.953 | 0.077 | 0.089 | 0.898 | 0.055 |
| | Basic Amenities | | 1.000 | 0.281 | 0.238 | 0.845 | 0.025 |
| | Threats | | | 1.000 | 0.944 | 0.047 | 0.050 |
| | Economic Status | | | | 1.000 | 0.061 | -0.017 |
| | Social Status | | | | | 1.000 | 0.044 |
| | Personal Satisfaction | | | | | | 1.000 |

Hypotheses can be tested by associated Chi-square test. It tested the listed functions are equal or not across the total groups. If value of significant value is small, discriminant function performs better than possibility on categorization of groups. The above table shows the value of Wilks' Lambda as 0.959. The value of Chi square test as 24.624. It is indicating that it has statistical significant with level of 1% significant. The value of correlation is shown as 0.201. It is indicating that there are good association between independent factors or variables and grouping factors or variables.

Table 4
Equality of Covariance Matrices - Box's M Test

| Determinants of Log | | |
|---------------------|---------|--------------------|
| GENDER | Ranking | Determinant Of Log |
| Male | 6 | 9.7 |
| Female | 6 | 10 |
| Shared among groups | 6 | 9.9 |

Ranks and natural logarithms of determinants in print are covariance matrices of group.

Table 4(a)

| Findings or Results - Test | | |
|--|---------------|-----------|
| Box's M Test | 34.4 | |
| F | Approximate | 1.6 |
| | Df 1 Value | 21 |
| | Value of Df 2 | 1276395.4 |
| | Significance | .036 |
| Examination or Test of (Ho) Null hypothesis - Covariance matrices of Equal group or population. | | |

From the above table, it is seen that the log determinant values were found to same and it is hereby interpreted that the groups considered in this study have not different covariance matrices.

Table 5**Table showing groups' prior probabilities**

| Groups' Prior Probabilities | | | Functions at Group Means or Centroids | |
|------------------------------------|-----------|---------------------------|--|----------|
| Gender | Functions | Cases applied on Analysis | | Function |
| | | Unweighted | Weighted | |
| Male | 0.500 | 282 | 282.000 | 0.218 |
| Female | 0.500 | 318 | 318.000 | -0.193 |
| Total | 1.000 | 600 | 600.000 | |

Every group has mean discriminant scores which are called centroids. Classifying cases' cutting point or scores are identified through table of Groups' prior probabilities. Gender has been taken for consideration to meet this study's purpose of discriminant. Both gender sections Male and Female are having value of 0.5 as prior point or score for both male and female groups. Value as 0.500 each hence it is concluded that the groups have best cutting points between Group means or centroids' values.

Table 6**Findings or results - exact classification – male and female groups**

| | | | Prediction on Classification of Group | | Total |
|----------|-----|---------------|--|---------------|--------------|
| | | Gender | Male | Female | |
| Original | No. | Male | 158 | 124 | 282 |
| | | Female | 128 | 190 | 318 |
| | % | Male | 56.0 | 44.0 | 100 |
| | | Female | 40.3 | 59.7 | 100 |

Dr. A. Royal Edward Williams / Afr.J.Bio.Sc. 6(Si2) (2024) 1-9

| | | | | | |
|----------|-----|--------|-------------------|--------------------|-----|
| Original | No. | Male | 133 | 149 | 282 |
| | | Female | 92 | 226 | 318 |
| | | Male | 47.2(Specificity) | 52.8 | 100 |
| | | Female | 28.9 | 71.1 (Sensitivity) | 100 |

58% of original grouped cases correctly classified.

From the above table, we could able to understand how the discriminant function works and from the result it is seen that 56% of the cases in both the category have done the same mistakes. Overall, it is noticed that 58% of the total group have correctly classified. And from the second part, 47.2 % of Male is having specificity in discrimination and 71.1 % of Female is shown sensitivity on discrimination.

Table 7 Association between Demographic Variables & factors that determining socio economic status and the personal satisfaction among the residents of Slum in to Metro and Non –Metro Centers in Tamil Nadu

| Factors | Safety | Basic Amenities | Threats | Economic Status | Social Status | Personal Satisfaction |
|---------------------------------|----------|-----------------|----------|-----------------|---------------|-----------------------|
| ONE WAY ANOVA- “F” Test | | | | | | |
| Age | 0.805 | 1.511 | 2.654 | 2.171 | 2.198 | 0.239 |
| Gender | 8.233** | 13.464** | 12.843** | 11.466** | 10.754** | 0.866 |
| Educational Qualification | 13.130** | 15.062** | 5.999** | 5.467** | 8.910** | 3.183** |
| Monthly Income | 4.842** | 9.833** | 11.580** | 9.537** | 2.929* | 4.813** |
| Status of the Residential Area | 4.717** | 7.790** | 2.848* | 1.768 | 4.723** | 6.606** |
| Religion | 4.021** | 7.198** | 2.989* | 2.052 | 3.546** | 6.400** |
| Total Number of Earning Members | 29.953** | 27.488** | 1.601 | 1.134 | 27.107** | 3.370* |
| Languages Known | 1.453 | 1.147 | 0.792 | 0.730 | 1.488 | 0.296 |
| Years of living | 1.820 | 2.487 | 0.139 | 0.288 | 1.116 | 3.176* |

| | | | | | | |
|------------------------------------|----------|----------|----------|----------|----------|----------|
| in Slum | | | | | | |
| Hours spending for revenue earning | 9.760** | 14.414** | 4.847* | 3.340 | 20.214** | 0.241 |
| PAIRED SAMPLE “t” TEST | | | | | | |
| Marital Status | 43.129** | 56.752** | 61.096** | 67.826** | 38.712** | 57.995** |
| Type of Family | 41.742** | 55.766** | 61.099** | 67.621** | 37.067** | 55.949** |
| Type of House | 42.059** | 56.126** | 62.337** | 68.201** | 37.480** | 55.788** |
| Native of Chennai | 42.367** | 56.530** | 62.788** | 68.377** | 37.730** | 56.632** |

While analysing the result of the one way ANOVA, it is noticed that In respect of the demographic variable “AGE” and the languages known, insignificant relationship exists between slum people’s Age & languages known and factors that determining slum dwellers’ socio economic and health conditions of Chennai slums. On the basis of Gender, Every factor is found significant statistically with 1% significant level except with the personal satisfaction. Regarding the relationship between Educational Qualification and factors that determining slum dwellers’ socio economic and health conditions of Chennai slums. Every factor is found statistically significant. In respect of the Status of the Residential Area and the Religion, Every factor is found significant statistically with 1% and 5% significant levels except factor “Economic Status” Regarding the total number of earning members, every factor is found significant statistically with 1% and 5% significant levels except factors Threats and the Economic Status. Regarding the association between the years of living in the slum and the factors of socio economic status, it is clear that there is insignificant relationship found except personal satisfaction with 5% significant level. In respect of the hours spending for earning and the factors of socio economic status, it is clear that every factor is found significant statistically with 1% and 5% significant levels except factors Economic status and the personal satisfaction. Regarding the relationship between marital statuses, Type of Family, residing house type and nativity, paired sample “t” test is done and got the results. It is found that all factors are significantly associated with all the factors at 1% level of Significance.

FINDINGS OF THE STUDY

As everybody is aware that the Slum is the heavily populated area of the City where people were found in the lower income level and this lower income may lead to the with ailing the life. They

Dr. A. Royal Edward Williams / Afr.J.Bio.Sc. 6(Si2) (2024) 1-9

may not good source of income. to Metro and Non –Metro Centers in Tamil Nadu slum houses don't have necessary amenities like electricity, water, sanitation and even proper way to go from their residence. They may be facing water stagnation during the rainy season which will lead to the health issues and also they do not have proper hospital facilities in their area. They have to go to a long distance for getting most of the benefits even education. And one of the significant difficulties is that they don't have the ownership on their residing house in Chennai. As poverty is the main companion for their livelihood, they have to engage their children too in various works for earning and hence their education will also be in question. Hence the researcher of the study has taken up the research work over factors or variables determining the slum dwellers' societal, economical & health conditions in to Metro and Non –Metro Centers in Tamil Nadu. The research findings are explained below.

CONCLUSION

There are many illiterate slum dwellers in to Metro and Non –Metro Centers in Tamil Nadu. Children of slum people are not going to schools regularly. Their knowledge, behaviour and exposure are not good. Government should make more awareness about education on these slum areas to make them literate. The hygienic and health status of slum people are very poor. Slum dwellers are exposed to open sewage or dirty lake or wastages, poor basic amenities of life, unhealthy and unhygienic practices, poor ventilation, impure atmosphere and unorganized housing size. So they are affected by the numerous diseases on their life regularly. They are living a challenging life day by day. Government should create health care policies for them. Primary Health centres and hospitals should create awareness programmes on slum areas to make healthy and hygienic slum dwellers. It is found that there are many migrants who are living more on slum areas. They are belonging to lower socio economic group. Most of the slum dwellers are living at the core or central part of the city so that they can easily move to their workplaces of city. They are crucial contributor to economic activities of the Chennai city. Hence, active and progressive participation is essential to solve the challenges or problems of slum people. Government should frame better housing policies or schemes to them. Therefore they can get house with better basic amenities. Slum dwellers' life quality will be uplifted. They are illiterate. Their children are not accessing to better education on their life. Their skills and knowledge are less. Government, NGOs, NPOs and other associations should make many educational awareness programmes on slum areas to enhance their knowledge and skills level. Once they are skilled, they can be employed at decent jobs. They can earn decent income. Eventually, slum people's life quality will be improved. Also state and central governments should make necessary arrangements on slum areas for betterment over society, economy, demography and health conditions of slum dwellers.

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Dr. A. Royal Edward Williams / *Afr.J.Bio.Sc. 6(Si2) (2024) 1-9*

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