Exploring Living Space Quality through Socio-Economic Lens

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Abstract:

A socioeconomic variable is a characteristic that can be measured and quantified to determine an individual's or group's social and economic status. Socioeconomic variables play a crucial role in determining the quality of living space available to individuals and communities. Variables such as income, literacy, poverty, population density, urban population, road density, and presence of SC/ST households are taken to find out the linkages with the Quality of Living Space. Karl Pearson's correlation have been used to show the linkages. Result shows that there is a significant relationship between socio-economic variables and indicators pertaining to living space. Some indicators shows a positive relationship while others shows a negative relationship indicating a hope for the future.

Keywords: Socioeconomic variables, Correlation, Quality of Living Space

Introduction:

Socioeconomic variables—such as income, literacy, poverty, population density, and social group identity—significantly influence the quality of living spaces, which encompass housing conditions, basic amenities, neighbourhood environment, and overall living standards. These variables determine access to adequate housing and, in turn, affect physical and mental health, educational opportunities, employment prospects, and social cohesion. Poor housing conditions can cause health issues, limit learning environments, reduce economic mobility, and weaken community ties, while better housing fosters well-being, opportunities, and sustainability. Recognizing the linkage between socioeconomic status and housing quality is vital for equitable development, effective urban planning, and sustainable community growth.

Understanding the linkages between socioeconomic variables and the quality of living space is crucial for addressing and improving overall living standards. The following are the selected Socio-economic Variables:

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Fig. 1.1

Objective:

- To figure out the linkages between the socio-economic variables and indicators pertaining to Quality of Living Space.

Database and Methodology:

Karl Pearson's correlation have been used to show the linkages amongst the indicators of quality of living space (permanent houses, good and livable houses, one or more rooms, separate kitchen, bathroom, toilet, source of water within the premises, electricity as source of lightning, LPG/PNG/Electricity as source of cooking fuel, closed drainage connectivity for waste water outlet and composite index of quality of living space) and socio-economic indicators (Population Density, Literacy Rate, SC/ST Population, Urban Population, per capita income, Poverty ratio, Disparity Index and road density).

$$r = \frac{\Sigma(x - \bar{x})\,(y - \bar{y})}{\sqrt{(x - \bar{x})2}\sqrt{(y - \bar{y})2}}$$

Where, $\bar{x}$ = mean of x variable

$\bar{y}$ = mean of y variable

This correlation has been computed through SPSS software.

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Results and Discussions:

Correlates of Quality of Living Space

Correlates of quality of living space refer to various factors and characteristics that contribute to the overall quality and livability of living space. These correlates are:

- **Households having Permanent Houses:**

Table 1.1 Correlates of Households having Permanent Houses

S.No.	Other Indicators of Living Space	Value		S.No.	Explanatory Variables	Value
1.	Good and Livable Houses	0.17		1.	Per Capita Income	0.41
2.	One or more Rooms	0.04		2.	Urban Population	0.37
3.	Separate kitchen within the House	0.08		3.	Literacy Rate	0.29
4.	Latrine within the House	0.30		4.	Population Density	0.19
5.	Bathroom within the House	0.63		5.	Road Density	0.39
6.	Source of Water within the Premises	0.58		6.	Poverty Ratio	-0.42
7.	Electricity for Lightning	0.48		7.	SC/ST Households	-0.41
8.	LPG/PNG/Electricity for Cooking	0.59				
9.	Closed Drainage Connectivity	0.53				
10.	Composite index of Quality of Living Space	0.52				

Correlation is significant at the 0.05 level

Table 1.1 presents correlations of households having permanent houses with variables of living space and other socio economic variables.

This indicates a positive relatively weak correlation of the households having permanent houses with good and livable houses, households having one or more rooms and households having separate kitchen within the house. It suggests a mild and minimal association. There is a moderate positive correlation of households having permanent houses with latrine within the house, electricity for lightning. It suggests that households having permanent houses are more likely to have these facilities.

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There is strong positive correlation of households having permanent houses with Bathroom within the house, Source of water within the Premises, LPG/PNG/Electricity for Cooking, Closed drainage connectivity and Composite index. It indicates that households having permanent houses are more likely to have these facilities. Strong positive correlation of Composite index with other individual variables suggests a consistent pattern across various aspects of living space.

Additionally, the explanatory variables listed alongside each correlation coefficient provide insights into the factors influencing the presence of permanent houses. These include per capita income, urban population, literacy rate, population density, road density, poverty ratio, and the proportion of Scheduled Caste/Scheduled Tribe households. The positive or negative values of these variables indicate their respective influence on the likelihood of households having permanent houses and better living conditions.

This indicates a moderate positive correlation between per capita income, urban Population, road density, and the households having permanent houses. Higher per capita income suggests better financial resources available to invest in housing, leading to improved living conditions. Urban areas typically offer better infrastructure, services, and housing options compared to rural areas. Better road connectivity often indicates improved access to amenities and services, including housing options.

It also shows a weak to moderate positive correlation between literacy rate, population density and the presence of permanent houses. Higher literacy rates often correlate with better access to employment opportunities, which can translate into improved housing conditions. While higher population density areas may face challenges in space availability, they also tend to have better infrastructure and services in urban settings.

There is a moderate negative correlation (-0.42) between the poverty ratio and the presence of permanent houses. Higher poverty ratios suggest a lack of financial resources, which can hinder access to quality housing and amenities.

Similarly, to the poverty ratio, this suggests a moderate negative correlation (-0.41) between the proportion of Scheduled Caste (SC) and Scheduled Tribe (ST) households and the presence of permanent houses. Historically marginalized communities may face barriers in accessing quality housing due to socio-economic disparities.

In summary, the table reveals the statistical relationships between socio-economic factors and the presence of permanent houses. Higher income, urban residence, literacy, and better infrastructure are positively associated with improved housing conditions, while poverty and belonging to marginalized communities are negatively associated.

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- **Households having Good and Livable Houses**

Table 1.2 appears to present the results of a correlation analysis between Good and Livable Houses with variables related to Living space quality and other socio-economic factors. It represents the positive correlation of the proportion of good and livable housing conditions with permanent houses, one or more rooms, separate kitchen within the house, latrine within the house, bathroom within the house, Electricity for lightning, LPG/PNG/Electricity for Cooking, Closed drainage connectivity and with composite index. It also represents a negative correlation (-0.02) of households having Source of water within the Premises and good and livable houses, suggesting that having a water source within premises might not necessarily correlate strongly with overall good and livable housing conditions.

Table 1.2: Correlates of Households having Good and Livable Houses

Sr. No.	**Other Indicators of Living Space**	Value		Sr. No.	**Explanatory Variables**	Value
1.	Permanent Houses	0.17		1.	Per Capita Income	0.31
2.	One or more Rooms	0.03		2.	Urban Population	0.27
3.	Separate Kitchen within the House	0.26		3.	Literacy Rate	0.13
4.	Latrine within the House	0.12		4.	Population Density	0.01
5.	Bathroom within the House	0.34		5.	Road Density	0.05
6.	Source of Water within the Premises	-0.02		6.	Poverty Ratio	-0.24
7.	Electricity for Lightning	0.477		7.	SC/ST Households	0.11
8.	LPG/PNG/Electricity for Cooking	0.35				
9.	Closed Drainage Connectivity	0.26				
10.	Composite index of Quality of Living Space	0.35				

Correlation is significant at the 0.05 level

Per Capita Income, Urban Population, and Literacy Rate show positive correlations with the good and livable houses, indicating that higher income, urbanization, and literacy rates are associated with better housing conditions. Conversely, Population Density, Road Density, Poverty Ratio, and the proportion of SC/ST households show weaker correlations or negative correlations with the Good

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and livable houses, suggesting that higher population density, road density, poverty, and a higher proportion of SC/ST households might be associated with poorer housing conditions.

- **Households having One or More Rooms**

Table 1.3 presents the correlations between various variables of living space, socio-economic variables and the likelihood of households having one or more rooms. This indicator has a weak positive correlation with the presence of permanent houses, Good and livable houses, Latrine within the house, Source of water within the premises, LP/PNG/Electricity for cooking. It has negative correlation with separate kitchen within the house, bathroom within the house, electricity for lightning, closed drainage connectivity as it indicates that households having one or more rooms are not likely to have these facilities. Comparing the correlation values for socio-economic variables, each variable has a positive correlation except for Poverty ratio and presence for SC/ST households indicating that as the households having one or more rooms increases then the poverty ratio and the persons belonging to Scheduled Caste/ Scheduled Tribe communities tends to decrease.

Table 1.3: Correlates of Households having One or More Rooms

Sr. No.	**Other Indicators of Living Space**	Value		Sr. No.	**Explanatory Variables**	Value
1.	Permanent Houses	0.04		1.	Per Capita Income	0.31
2.	Good and Livable Houses	0.03		2.	Urban Population	0.27
3.	Separate Kitchen within the House	-0.04		3.	Literacy Rate	0.01
4.	Latrine within the House	0.05		4.	Population Density	0.03
5.	Bathroom within the House	-0.01		5.	Road Density	0.14
6.	Source of Water within the Premises	0.10		6.	Poverty Ratio	-0.24
7.	Electricity for Lightning	-0.045		7.	SC/ST Households	-0.03
8.	LPG/PNG/Electricity for Cooking	0.05				
9.	Closed Drainage connectivity	-0.04				
10.	Composite index of Quality of Living Space	0.61				

Correlation is significant at the 0.05 level

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- **Households having Separate Kitchen within the House**

Table 1.4 appears to be presenting the correlations between households having a separate kitchen within the house and various other variables of living space, as well as explanatory variables that might influence this relationship. It provides insight into the factors associated with the presence of a separate kitchen within households, which could be valuable for policymakers, urban planners, and researchers studying housing and living conditions. There is a positive but relatively weak correlation with almost all variables except for a few.

Table 1.4: Correlates of households having Separate Kitchen within the House

Sr. No.	**Other Indicators of Living Space**	Value		Sr. No.	**Explanatory Variables**	Value
1.	Permanent Houses	0.08		1.	Per Capita Income	0.46
2.	Good and Livable Houses	0.26		2.	Urban Population	0.18
3.	One or more Rooms	-0.04		3.	Literacy Rate	0.48
4.	Latrine within the House	0.63		4.	Population Density	0.10
5.	Bathroom within the house	0.63		5.	Road Density	0.17
6.	Source of Water within the Premises	0.23		6.	Poverty Ratio	-0.59
7.	Electricity for Lightning	0.58		7.	SC/ST Households	0.10
8.	LPG/PNG/Electricity for Cooking	0.48				
9.	Closed Drainage connectivity	0.33				
10.	Composite index of Quality of Living Space	0.49				

Correlation is significant at the 0.05 level

A high positive correlation (i.e. 0.63) with latrine within the house and bathroom within the house suggests that households with these amenities are more likely to have a separate kitchen. Similarly, positive correlations with "Electricity for lightning" (0.58) and "LPG/PNG/Electricity for Cooking" (0.48) indicate that households with access to these utilities are more likely to have a separate kitchen. On the other hand, a negative correlation with the one or more rooms (-0.04) and with Poverty Ratio (-0.59) suggests that households in lower poverty brackets are more likely to have a separate kitchen.

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- **Households having Latrine within the House**

Table 1.5 appears to present the correlations between households having a latrine within the house and various variables of living space, as well as explanatory variables. The table provides insights into which living space variables and explanatory variables are correlated with the presence of a latrine within the house. It suggests which factors might be important in determining whether households have this facility within their dwelling. For example, higher per capita income, literacy rate, and access to electricity seem to be positively correlated with having a latrine within the house, while factors like poverty ratio show a negative correlation.

Table 1.5: Correlates of Households having Latrine within the House

Sr. No.	**Other Indicators of Living Space**	Value		Sr. No.	**Explanatory Variables**	Value
1.	Permanent Houses	0.30		1.	Per Capita Income	0.50
2.	Good and Livable Houses	0.12		2.	Urban Population	0.36
3.	One or more Rooms	0.05		3.	Literacy Rate	0.51
4.	Separate Kitchen within the House	0.63		4.	Population Density	0.14
5.	Bathroom within the House	0.72		5.	Road Density	0.15
6.	Source of Water within the Premises	0.55		6.	Poverty Ratio	-0.71
7.	Electricity for Lightning	0.54		7.	SC/ST Households	0.004
8.	LPG/PNG/Electricity for Cooking	0.63				
9.	Closed Drainage connectivity	0.46				
10.	Composite index of Quality of Living Space	0.59				

Correlation is significant at the 0.05 level

There is a positive but weak correlation between latrine provision within the house and the presence of permanent houses, Good and livable houses, one or more rooms, closed drainage connectivity, urban population, population density, road density, and the presence of marginalized communities. There is a moderate and highly positive correlation between the latrine provision within the house

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and the presence of separate kitchen within the house, bathroom within the house, source of water within the premises, electricity for lightning, LPG/PNG/Electricty for lightning, composite index, per capita income, and literacy rate.

The correlation coefficient between poverty ratio and households having latrine within the house is -0.71, indicating a strong negative correlation. This implies that as the poverty ratio decreases (indicating less poverty), the likelihood of households having a latrine within the house increases.

- **Households having Bathroom within the House**

Table 1.6 presents the correlations between households having a bathroom within the house and various other variables of living space, as well as explanatory variables that might influence these correlations.

Table 1.6: Correlates of Households having Bathroom within the House

Sr. No.	**Other Indicators of Living Space**	Value		Sr. No.	**Explanatory Variables**	Value
1.	Permanent Houses	0.63		1.	Per Capita Income	0.63
2.	Good and Livable Houses	0.34		2.	Urban Population	0.49
3.	One or more Rooms	-0.15		3.	Literacy Rate	0.51
4.	Separate Kitchen within the House	0.63		4.	Population Density	0.23
5.	Latrine within the House	0.72		5.	Road Density	0.37
6.	Source of Water within the Premises	0.62		6.	Poverty Ratio	0.77
7.	Electricity for Lightning	0.77		7.	SC/ST Households	-0.18
8.	LPG/PNG/Electricity for Cooking	0.78				
9.	Closed Drainage connectivity	0.66				
10.	Composite index of Quality of Living Space	0.73				

Correlation is significant at the 0.05 level

There is a moderate positive correlation between households having a bathroom within the house and residing in permanent houses. This suggests that households in permanent houses are more likely to have bathrooms within their homes. There is a positive correlation, though weaker than with

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permanent houses, indicating that households in good and livable houses are somewhat more likely to have bathrooms within their homes.

Interestingly, there is a negative correlation (-0.15) with the number of rooms within a house. This suggests that households with fewer rooms are slightly more likely to have bathrooms within the house. This could be because smaller houses may have more compact layouts, making it easier to incorporate a bathroom. There is a strong positive correlation with separate kitchen, latrine facility, source of water within the premises, electricity for lightning, LPG/PNG/Electricity for cooking, closed drainage connectivity and composite index indicating that households with a separate kitchen within the house are more likely to have bathrooms within their homes. This could be because houses designed with separate kitchens tend to have more space and amenities overall. It also suggests that households with a latrine within the house are highly likely to also have bathrooms within their homes. This reflects a pattern of better sanitation facilities overall. Households with a water source within the premises are more likely to have bathrooms within their homes. This suggests that access to water infrastructure is associated with better housing amenities. Households with electricity for lighting are highly likely to have bathrooms within their homes. This reflects a broader trend of better infrastructure and living conditions. It also indicates that households with access to modern cooking fuels are highly likely to have bathrooms within their homes. This suggests a correlation between better cooking facilities and overall housing amenities. Households with closed drainage connectivity are more likely to have bathrooms within their homes. This reflects a pattern of better sanitation infrastructure overall, indicating that households with higher composite indices of living space are highly likely to have bathrooms within their homes. This suggests that overall, better living conditions are associated with the presence of bathrooms within the house. Explanatory variables provide additional context for understanding the correlations. For example, higher per capita income, urban population, literacy rate, lower poverty ratio, and presence of certain population groups (SC/ST households) are associated with a higher likelihood of households having bathrooms within their homes. Conversely, population density does not show as strong a correlation with the presence of bathrooms.

- **Households having Source of Water within the Premises**

Table 1.7 presents the correlations between households having a source of water within the premises and various other variables of living space, along with their explanatory variables.

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Table 1.7: Correlates of Households having Source of Water within the Premises

Sr. No.	**Other Indicators of Living Space**	Value		Sr. No.	**Explanatory Variables**	Value
1.	Permanent Houses	0.58		1.	Per Capita Income	0.39
2.	Good and Livable Houses	-0.24		2.	Urban Population	0.31
3.	One or more Rooms	-0.01		3.	Literacy Rate	0.29
4.	Separate Kitchen within the house	0.23		4.	Population Density	0.24
5.	Latrine within the House	0.55		5.	Road Density	0.52
6.	Bathroom within the House	0.62		6.	Poverty Ratio	-0.50
7.	Electricity for lightning	0.29		7.	SC/ST Households	-0.36
8.	LPG/PNG/Electricity for Cooking	0.60				
9.	Closed Drainage connectivity	0.55				
10.	Composite index of Quality of Living Space	0.51				

Correlation is significant at the 0.05 level

There is a positive correlation of source of water within the premises with the presence of permanent houses, separate kitchen within the house, latrine within the house, bathroom within the house, electricity for lightning, LPG/PNG/Electricity for cooking, closed drainage connectivity and composite index. It implies that households having the provision of these facilities are more likely to have source of water within the premises.

There is a negative correlation of -0.24 between good and livable houses and having a source of water within the premises. This suggests that households with better quality houses are less likely to have water sources within their premises. There is a very weak negative correlation of -0.01 between the number of rooms in a house and having a source of water within the premises. This correlation is almost negligible.

Explanatory variables given in table 5.7 are the factors that might influence the presence of water sources within households. For example, higher per capita income might enable households to afford better housing with water sources within the premises, while higher poverty ratios and the presence

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of marginalized communities might be associated with a lack of such amenities. The values associated with these variables indicate the strength and direction of their correlations with the presence of water sources within households.

- **Households having Electricity for Lightning**

Table 1.8 presents the correlations between households having electricity for lighting within the premises and various other variables of living space, as well as explanatory variables. There is a positive correlation of households having electricity for lightning with the presence of permanent houses, good and livable houses, separate kitchen within the house, latrine within the house, bathroom within the house, source of water within the premises, LPG/PNG/Electricity for cooking, closed drainage connectivity and composite index suggesting an influential relationship as the presence of these facilities indicates the chances of having the electricity for lightning.

Surprisingly, there is a very weak negative correlation (-0.04), indicating that the number of rooms in a household doesn't significantly influence the presence of electricity for lighting within the premises.

Table 1.8: Correlates of Households having Electricity for Lightning

Sr. No.	**Other Indicators of Living Space**	Value		Sr. No.	**Explanatory Variables**	Value
1.	Permanent Houses	0.48		1.	Per Capita Income	0.58
2.	Good and Livable Houses	0.47		2.	Urban Population	0.41
3.	One or more rooms	-0.04		3.	Literacy Rate	0.47
4.	Separate Kitchen within the house	0.58		4.	Population Density	0.11
5.	Latrine within the House	0.54		5.	Road Density	0.24
6.	Bathroom within the House	0.77		6.	Poverty Ratio	-0.59
7.	Source of Water within the Premises	0.29		7.	SC/ST Households	-0.006
8.	LPG/PNG/Electricity for Cooking	0.67				
9.	Closed Drainage connectivity	0.47				
10.	Composite index of Quality of Living Space	0.61				

Correlation is significant at the 0.05 level

There is a positive correlation of this indicator with the other socio-economic variables except poverty ratio and presence of SC/ST households. The correlation is strongly negative (-0.59), with poverty ratio indicating that areas with lower poverty ratios are more likely to have households with electricity for lighting within their premises. This variable also shows a very weak correlation with the presence

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of marginalized communities (-0.006), suggesting a negligible relationship between the proportion of Scheduled Caste/Scheduled Tribe households and the presence of electricity for lighting.

- **Households having LPG/PNG/Electricity for Cooking**

Table 1.9 presents the correlations between various variables of living space and explanatory variables concerning the presence of LPG/PNG/Electricity for lighting within households' premises. These correlations provide insights into the factors associated with the presence of modern cooking sources within households' premises, indicating that factors such as income level, housing quality, and infrastructure availability play crucial roles.

There is a moderate to strong positive correlation of LPG/PNG/Electricity for cooking with all other variables of living space and explanatory variables except for few cases as there is a weak positive correlation with the households having one or more rooms and there is a negative correlation with the poverty ratio and the presence of SC/ST households. It suggests that with the increase in households having LPG/PNG/Electricity for cooking, the proportion of households having other aspects of living space quality also tends to increase.

Table 1.9: Correlates of Households having LPG/PNG/Electricity for Cooking

Sr. No.	**Other Indicators of Living Space**	Value		Sr. No.	**Explanatory Variables**	Value
1.	Permanent Houses	0.59		1.	Per Capita Income	0.67
2.	Good and Livable Houses	0.35		2.	Urban Population	0.59
3.	One or more Rooms	0.05		3.	Literacy Rate	0.48
4.	Separate Kitchen within the House	0.48		4.	Population Density	0.36
5.	Latrine within the House	0.63		5.	Road Density	0.49
6.	Bathroom within the House	0.78		6.	Poverty Ratio	-0.60
7.	Source of Water within the Premises	0.60		7.	SC/ST Households	-0.11
8.	Electricity for Lightning	0.67				
9.	Closed Drainage Connectivity	0.75				
10.	Composite index Quality of Living Space	0.67				

Correlation is significant at the 0.05 level

There's a strong negative correlation between poverty ratio and the presence of LPG/PNG/Electricity for cooking. This suggests that households with higher poverty ratios are less likely to have access to modern lighting sources.

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- **Households having Closed Drainage Connectivity for Wastewater Outlet**

Table 1.10 presents the correlation coefficients between households having closed drainage connectivity for waste water outlet and various variables of living space, as well as explanatory variables.

There is a moderately positive correlation (0.53) between households with closed drainage connectivity and permanent houses. This suggests that households in permanent houses are more likely to have closed drainage connectivity. There is a positive correlation (0.26), albeit weaker than permanent houses, indicating that households in good and livable houses are also somewhat more likely to have closed drainage connectivity.

Table 1.10: Correlates of Households having Closed Drainage Connectivity for Wastewater outlet

Sr. No.	**Other Indicators of Living Space**	Value		Sr. No.	**Explanatory Variables**	Value
1.	Permanent Houses	0.53		1.	Per Capita Income	0.61
2.	Good and Livable Houses	0.26		2.	Urban Population	0.55
3.	One or more Rooms	-0.04		3.	Literacy Rate	0.38
4.	Separate Kitchen within the House	0.33		4.	Population Density	0.48
5.	Latrine within the House	0.46		5.	Road Density	0.72
6.	Bathroom within the House	0.66		6.	Poverty Ratio	-0.52
7.	Source of Water within the Premises	0.55		7.	SC/ST Households	-0.22
8.	Electricity for Lightning	0.47				
9.	LPG/PNG/Electricity for Cooking	0.75				
10.	Composite index of Quality of Living Space	-0.58				

Correlation is significant at the 0.05 level

The correlation coefficient is close to zero (-0.04), suggesting a weak or no relationship between the number of rooms and closed drainage connectivity.

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This indicator has a moderate positive correlation with households with a separate kitchen within the house, latrine within the house, electricity for lighting, literacy rates, population density. There is a strong positive correlation with the households having bathroom within the house, households with a water source within the premises, households using LPG/PNG/Electricity for cooking, per capita income, proportion of urban population, road density. There is a moderate to strong negative correlation with the composite index, poverty ratio, proportion of Scheduled Caste/Scheduled Tribe households.

- **Composite index of Quality of Living Space**

Table 1.11 seems to show the correlates of a composite index related to living space quality. Each row represents a different indicator of living space quality, and the values represent the correlation coefficients between each indicator and the composite index. The explanatory variables are the factors that contribute to or explain the variations observed in the composite index. It shows that each indicator positively contributes to the overall composite index. Having one or more rooms in the living space shows a weaker positive correlation (0.06) with the composite index compared to the previous variables. Explanatory variables also have a positive relation with the composite index except for the poverty ratio and presence of SC/ST households.

Table 1.11: Correlates of Composite index of Quality of Living Space

Sr. No.	**Other Indicators of Living Space**	Value		Sr. No.	**Explanatory Variables**	Value
1.	Permanent Houses	0.52		1.	Per Capita Income	0.78
2.	Good and Livable Houses	0.35		2.	Urban Population	0.72
3.	One or more Rooms	0.06		3.	Literacy Rate	0.64
4.	Separate Kitchen within the House	0.49		4.	Population Density	0.33
5.	Latrine within the House	0.59		5.	Road Density	0.42
6.	Bathroom within the House	0.73		6.	Poverty Ratio	-0.87
7.	Source of Water within the Premises	051		7.	SC/ST Households	-0.25
8.	Electricity for Lightning	0.61				
9.	LPG/PNG/Electricity for Cooking	0.67				
10.	Closed Drainage Connectivity	0.58				

Correlation is significant at the 0.05 level

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Conclusion:

Finding out the correlation between socio-economic variables and indicators of quality of living space is essential for evidence-based policymaking, equitable resource allocation, promoting social justice, effective urban planning, and improving public health and well-being. It can be concluded that the correlation values of indicators of living space with themselves and with socio-economic variables in most of the cases is positive except with poverty ratio and with the proportion of SC/ST households. This suggests that higher levels of poverty are associated with poorer living conditions. The poverty ratio reflects the percentage of individuals or households living below the poverty line. Higher poverty ratios typically indicate limited access to quality housing, inadequate access to services, and higher exposure to environmental risks. This negative correlation highlights the critical need for interventions aimed at reducing poverty to improve living conditions and overall quality of life for affected populations. Similarly, the negatively correlation of SCs/STs households with the quality of living space indicates that SC/ST households are more likely to live in inadequate housing with limited access to basic services. The historical and systemic marginalization of these communities often restricts their access to quality housing and supportive neighbourhood environments. The challenges faced by SCs/STs populations in accessing education, employment, and social services perpetuate a cycle of poverty and inadequate living conditions. This correlation underscores the importance of targeted policies and programs to address the specific needs and challenges of SCs/STs communities, promoting social equity and improving their living conditions.

Exceptionally, some variables have negative correlation with the presence of one or more rooms such as households having separate kitchen, bathroom, source of water within the premises, electricity for lightning and closed drainage connectivity for waste water outlet. This negative correlation can be attributed to a variety of factors, including economic constraints, urban vs. rural housing dynamics, housing type and structure, socio-cultural preferences, and housing policies. Understanding these factors helps in appreciating the complexities of housing quality assessments and the diverse ways in which living space is utilized and valued across different contexts.

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https://www.gejournal.net/index.php/IJSSIR

References:

- Acharya, R. H., & Sadath, A. C. (2019). Energy poverty and economic development: Household-level evidence from India. *Energy and Buildings*, 183, 785-791.
- Bardhan, R., Kurisu, H., Kiyo., & Keisuke, H. (2011). Linking Urban Form and Quality of Life in Kolkata, India, 47th ISOCARP Congress 2011.
- Davis, J. B. (2006). The turn in economics: neoclassical dominance to mainstream pluralism? *Journal of institutional economics*, *2*(1), 1-20.
- *Govindaraju, B. M. (2012). Quality of Life of Slum Women: A Case Study of Mangalore City. Journal of Economics and Sustainable Development, 3(1), 1-9.* ***https://www.iiste.org/Journals/index.php/JEDS/article/download/1164/1085***
- Radhakrishna, R., & Ray, S. (2005). *Handbook of poverty in India: Perspectives, policies, and programmes*. USA: Oxford University Press.
- Torlesse, H., Cronin, A. A., Sebayang, S. K. (2016). Determinants of stunting in Indonesian children: evidence from a cross-sectional survey indicate a prominent role for the water, sanitation and hygiene sector in stunting reduction. *BMC Public Health*, 16, 669. https://doi.org/10.1186/s12889-016-3339-8
- UNDP (United Nations Development Programme), OPHI (Oxford Poverty and Human Development Initiative) (2022). Global Multidimensional Poverty Index (MPI): Unpacking deprivation bundles to reduce multidimensional poverty. New York.
- United Nations Development Programme, (UNDP). (2019a). *Human Development Report 2019: Human Development Index*. Retrieved from http://hdr.undp.org/en/composite/HDI.
- United Nations Development Programme. (UNDP). (2019b). *Global Multidimensional Poverty Index (MPI): Illuminating Inequalities.* New York. http://hdr.undp.org/en/2019-MPI
- United Nations Development Programme, (UNDP). (2019c). *Human Development Report*. New Delhi: Oxford University Press.

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https://www.gejournal.net/index.php/IJSSIR