CHAPTER VII

HOUSING, NUTRITION, HEALTH AND LONGEVITY STATUS OF MUSLIMS

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CHAPTER VII

HOUSING, NUTRITION, HEALTH AND LONGEVITY STATUS OF MUSLIMS

In the present chapter an assessment of Muslim housing and health conditions has been made on the basis of primary data. It is a widely acknowledged fact that there is a close relationship between housing conditions and the health of the inhabitants. Good quality housing is the key element to good health. Poor quality housing leads to various diseases and other health related problems. Therefore, everybody should have good quality housing and a congenial environment, which makes one happy and healthy as well. The housing quality also plays an important role in the performance of domestic and economic duties. Bad housing environment adversely affects the health of women, young ones (infants) and the older people (senile) because most of the time they live in the house.

VII.1 Muslim Housing Conditions and Characteristics in Aligarh City

Housing is one of the three basic needs of man and has a direct relationship with the economic, social and cultural life of today’s complex communities. U.N. article 11(1) of the International Covenant on Economic, Social and Cultural Rights which refers to ‘the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing’.

Misra cited Aroni in his work who said that, “for the individuals or the family, the house is both shelter and symbol, physical protection and physiological identity of economic value and a foundation for security and self respect”.1

The study conducted by Singh and Rehman shows that nearly 30 per cent of the total population in Aligarh city lives in the houses, which do not have bathrooms, toilets, windows and proper ventilation system. It also concludes that there is an acute shortage of housing in the city both qualitatively and quantitatively.²

Therefore, housing is the basic requirement and should be given high priority. Proper and adequate shelter is a must because it enhances the performance level of the residents in any field. In the present study various indicators of good housing have been taken into consideration.

VII.2. Ownership Status of the house

There are two ways of getting a house – buying or having own house and renting it. According to Census 2001, the total numbers of households in the State of Uttar Pradesh were 25,760,601. In Aligarh District the numbers of households were 4,65,488 and in Aligarh city it was 1,02,004. The present work includes three types of housing status i.e. owned house, and rented house and govt. quarters.

<table>
<thead>
<tr>
<th>Ownership Status</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owned House</td>
<td>2,380</td>
<td>87.02</td>
</tr>
<tr>
<td>Rented House</td>
<td>315</td>
<td>11.51</td>
</tr>
<tr>
<td>Govt. Quarters</td>
<td>40</td>
<td>1.46</td>
</tr>
</tbody>
</table>

Source: Based on Primary Data.

As the table VII.1 describes that out of 2,735 households 2,380 were the owned

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Aligarh City
Wardwise Muslim Owned Houses
(2004-2005)

Source: Based Upon the Computation of Primary Data Generated Through Field Surveys

Fig.VII.1
houses, while 315 were the rented houses and the remaining 40 were the government quarters. Percentage wise owned houses have the highest percent that is 87.02 per cent. At the State of Uttar Pradesh level the percentage of owned houses is 94.7 per cent.3

Figure VII. 1 indicates a very high percentage of Muslim owned houses in different wards of Aligarh city. Almost all the wards represent a very high percentage of owned houses, either in the Muslim majority wards or the Muslim minority wards. The southwestern peripheral wards including Shah Jamal ward no. (10), Bhujpura no. (23), and A.D.A. Colony no. (38) represent high percentage of owned houses that is 68 to 84 per cent. Similar can be seen in case of Jeewangarh no. (47), which is also a peripheral ward. Jamalpur no.(30), is a Muslim majority ward and centrally located in the Civil Lines but in case of house ownership it comes in the high category. The reason is that there are three mohallas under this ward these are Nagla Jamalpur, Jamalpur and Anoopshahr road. The residents of Anoopshahr road are almost living in the rented house that is why the percentage of owned houses is less in this ward.

If we see the low percentage of owned houses, there are only two wards one is no.14 (Zameerabad) and the other is no. 57 (University Area). In Zameerabad there are only 5 households of Muslims. Nearly 40 per cent of them have own houses and 60 per cent are living in the rented houses. In the University Area around 44.42 per cent are owned houses and 22.58 per cent are the rented houses and 33 per cent are the government rented quarters including Tar Banglow and Radio Colony. In the very low category there is only one ward that is no.1 (Sarai Deen Dayal) which represents 5 Muslim households.

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Out of which 20 per cent have the owned houses and 80 per cent have the rented houses.

At last it can be analyzed that except a few wards almost all the wards represent owned houses status. This ownership status is more in the old part of city then the peripheral and the Civil Lines wards. This may be due to the fact that in peripheral and Civil Lines wards a large percentage of population is recent migrants who have not yet succeeded in making their own house. Another reason may be that their personal financial house building capacity is less than the standard and location of the house they envisage to build at. Hence, they compulsively resort to reside in the rented house.

VII.3. Housing Space and Crowding

Overcrowding is related to the socio-economic levels of the people. Gilbert analyzed that in the third world cities homelessness is not as severe as the overcrowded, poorly serviced and flimsy accommodations that often constitute a home in these cities.4

Overcrowding is an alarming compulsion of Muslims’ housing in Aligarh city. The average household size of Muslims in the city as a whole is 9.12 persons per household. A study published by Housing Corporation of U.K. found that Muslim children are almost three times more likely than the rest of the population to live in overcrowded accommodation.5

Wardwise Average Area of the House

The information of the area of the house has been gathered at the time of survey through the personal interview with the respondents and the visual

Aligarh City
Wardwise Average Area of the Muslim House
(2004-2005)

Source: Based Upon the Computation of Primary Data Generated Through Field Surveys

Fig.VII.2
verification. The size has been estimated in square yards. The average size has been calculated after adding the size of all the sampled households of every ward and dividing this by the total number of sampled households in each ward.

Figure VII.2 deals with the average area of the house. The figure clearly reveals the small house size except a few wards. Out of 44 Muslim inhabited wards 33 wards indicate very small size of the house from 30 to 90 sq. yards. Ward no. 49 (Dodhpur) and no.52 (Badar Bagh) show very large size of the house within the range from 343 to 426 sq. yards. In the high and medium size group there were only 2 and 1 wards respectively. Ward no. 44 (Lekhraj Nagar) and 57 (University Area) represent large size of the houses whereas ward no.43 (Zohra Bagh) with 250 sq. yards shows medium size of the houses. Six wards show small size of the houses. Out of these six wards three are located in the Civil Lines and three are in the old part of the city within a range of 91 to 174 sq. yards. Almost all the wards located in the old part of the city and the peripheral wards of the western and south-western parts of the city lie in the very small housing category. The Civil Lines wards show a relatively spacious housing structure in comparison to old city’s wards. The housing congestion can also be seen over there in the old city’s wards.

**Wardwise Per Capita Living Space**

The other variable, which measures the housing congestion and over crowdedness in the house, is the per capita living space. This has been obtained by dividing the total area of the sampled houses in a ward with its total population. Per capita living space is associated with living density and the pressure on household environment. Where the per capita living space is large
Aligarh City
Wardwise Per Capita Muslim Living Space
(2004-2005)

Source: Based Upon the Computation of Primary Data Generated Through Field Surveys

Fig.VII.3
the representative housing conditions are better and where it is small the vice-versa is the case.

Figure VII.3 represents wardwise per capita living space among Muslims in Aligarh city. After examines the figure it can be analysed that except a few wards the living density is very high and the per capita living space availability is very low among the Muslims. Only ward no. 49 (Dodhpur) has 50 to 61 sq. yards per capita living space. This ward is socio-economically a well developed ward. However, it is crucial to note that the large size houses and the very high per capita living space also includes the lawn area or the open space of the house, because even in the very large houses the actual built up area or overhead roof area is not very large. After that, ward no. 44 (Lekhraj Nagar), no.52 (Badar Bagh) and no. 57 (University Area) represent the high per capita living space in the range from 39 to 60 sq. yards. Ward no. 43 (Zohra Bagh) shows medium share of per capita living space that is 28 to 39 sq. yards. Out of 44 Muslim inhabited wards a vast majority of 39 wards are in the very low category showing only 6 to 17 sq. yards space per person.

There is a strong correlation between the average size of the house and the per capita living space. Smaller is the size lower will be the per capita living space and larger is the size greater will be the per capita living space.

Wardwise Average Rooms:

Number of living and non-living rooms in a house is also an important indicator for the analysis of overcrowded condition of the houses. The average number of living and non-living (kitchen, toilet etc.) rooms among the Muslims in Aligarh city is 3.57 rooms per household, whereas the average household size is 9.12 persons.
Aligarh City
Wardwise Average Rooms in the Muslim Houses (2004-2005)

Source: Based Upon the Computation of Primary Data Generated Through Field Surveys

Fig. VII.4
Figure VII.4 shows the wardwise distribution of rooms in Aligarh city. The range varies from 0.9 to 7.0. In the high range there are only three wards of the Civil Lines area. These are ward no. 44 (Lekhraj Nagar), no. 49 (Dodhpur) and no. 52 (Badar Bagh) with 5 to 7 rooms per household. The average area of the house and the per capita living space is also very high in the above said wards. Hence, the number of rooms is also very high. The houses of these wards are very spacious. The next group consists of 4 to 5 rooms per household and in this category there are four wards, two of them located in the old city part, that is ward no. 39 (Sarai Nawab) and the other one on the western periphery that is no. 18 (Nagla Kalar), the remaining two are located in the Civil Lines that is ward no. 57 (University Area) and no. 43 (Zohra Bagh). There are 13 wards which represent 3 to 4 rooms per household. Out of these 3 are located in the Civil Lines and 10 are located in the old and central part of the city. The peripheral wards of the Civil Lines as well as the city represent small number of rooms per household, that is, 2 to 3. There are twenty wards with 2 or 3 rooms per household. In the very low category there are only four wards. These are no. 1 (Sarai Deen Dayal), no. 5 (Sarai Bala), no. 23 (Bhujpura) and no. 58 (Manik Chowk).

Figure VII.4 clearly reveals that a total of 37 wards have 1 to 4 rooms per household, although the household size as well as the family size in these wards is quite large. Hence, over crowdedness can easily be seen in these houses. Singh’s study also shows that only 93 per cent of very low income and 77.86 per cent of low-income households having one room houses because of poor economic conditions.\(^6\) Space availability is very important for an

individual's growth and inter-personal relationship with the other family members.

**VII.4. Nature of Housing among the Muslims**

Nature of housing is also one of the representative indicators for the measurement of quality of the habitat and the resultant quality of life of the inhabitants. Everybody needs a comfortable house. The basic objective of any house is the construction or nature of the house. In the present study four types of housing construction have been taken into consideration for the better understanding of the housing quality. These are as follows:

(i) Kutch house – Construction with materials such as thatch roof, grass, reed, mud and bricks etc.

(ii) Semi pucca house – The houses made largely with bricks and mortar.

(iii) Pucca house - The houses made of cement and bricks.

(iv) Modern tiled house – The houses with materials such as cement, bricks, stones and marbles with plastered floor, roof, inner-outer walls and modern facilities.

**Table VII.2**

<table>
<thead>
<tr>
<th>Wardwise Nature of Muslim Houses in Aligarh City (2004-2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Houses</strong></td>
</tr>
<tr>
<td>Kutcha</td>
</tr>
<tr>
<td>Semi pucca</td>
</tr>
<tr>
<td>Pucca</td>
</tr>
<tr>
<td>Modern tiled</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Source: Based on Primary Data.
Table VII.2 indicates that there were 769 kutcha, 881 semi pucca, 820 pucca, and 265 modern tiled houses among the Muslims in Aligarh city. The table also shows percentage distribution, which is 28.1 per cent for kutcha, 32.2 per cent for semi pucca 30.0 per cent for pucca and 9.7 per cent for the modern tiled houses. The percentage of double storeyed houses is 40.47 per cent. This data further highlights the poor status of Muslim community. Housing quality which is one of the major indicators of the well being of the people shows that the Muslims of Aligarh city has only 9.7 per cent modern tiled houses. Around 40 per cent Muslim households are made of thatch, mud, inferior bricks and mortar.

**Wardwise Modern Tiled Houses**

The percentage of modern tiled houses can be seen in figure VII.5. Out of 44 wards only 2 wards represent very high percentage of modern tiled houses within the range of 54.5 to 68.0 per cent. These wards are no.49 (Dodhpur) and no.52 (Badar Bagh) located in the Civil Lines. None of the wards in the old city have very high percentage of modern tiled houses. Almost all the modern tiled houses are located in the Muslim inhabited wards of the Civil Lines. Although, there are some Muslims in the old city who are financially good but are less educated. Their social guests are from within the likeminded business community. Hence, they have not groomed their houses on modern parameters despite the fact of their affordability. This indicates that the modern housing facilities among the Muslims are largely confined to their educated localities in the Civil Lines wards. Educated Muslims of the Civil Lines despite relatively lower incomes have better housing than the higher
Aligarh City
Wardwise Modern Tiled Houses of Muslims
(2004-2005)

Index Percentage

54.5-68.0
40.9-54.4
27.3-40.8
13.7-27.2
0.0-13.6
Nill

Source: Based Upon the Computation of Primary Data Generated Through Field Surveys

Fig.VII.5
income Muslims of the old city. Hence, modern housing is more a function of education and the aesthetic sense than the income.

The northern and western peripheral wards of the city as well as the central wards of the old part of the city are being represented by the low to very low percentage of modern tiled housing. In these categories we have as many as 38 wards. Most of them are located in the old city center and the periphery. The houses in the city centre are generally congested. Most of them are the low-income wards and located on the periphery of the city.

**Wardwise Double Storey Houses**

This indicator has positive as well as negative impact on the housing quality. Where the average area of the house is large and the construction of house is based on cement, stones, marbles etc., a double or multi-storeyed house will be a symbol of high socio-economic status. But it will not be considered an advantage or status in case of those houses where the size is small and the houses are made of bricks and cement. Here, the double storeys depict a housing congestion. This housing congestion shows high built up density, which is higher in the old part of the city in comparison to the Civil Lines. There is a clear intra-city variation in the built up density and the congestion. Due to the high built up density in the old walled city areas the temperature is higher than in the Civil Lines and other peripheral areas, so these areas may have a ‘heat Island’ effect.

There are 40.47 per cent double storeyed houses among the Muslims in Aligarh city. Figure VII.6 gives us a view of double storeyed housing structure in the city. In the very high percentage group there are only two wards; no.27 (Barahdwari) and no. 39 (Sarai Nawab) show 80.5 to 100 per cent double storeyed houses. Both of them are located in the old city area. In the second
Aligarh City
Wardwise Double Muslim Storey Houses
(2004-2005)

Index Percentage

80.5 - 100
60.9 - 80.4
41.3 - 60.8
21.7 - 41.2
2.00 - 21.6
Nil

Source: Based Upon the Computation of Primary Data Generated Through Field Surveys

Fig.VII.6
category there are seven wards located again in the old part of the city. The medium category wards are also there in the old part of the city with a small house size. Almost all the peripheral and Civil Lines wards represent low to very low percentage of double storeyed houses in the city.

Hence, an assessment of housing quality in Aligarh city can be made on the basis of given data. It shows that the old part of the city or the centre of the city has a congested housing structure in terms of both small house size and type of structure. Whereas, in the Civil Lines the house size is relatively large with a good housing structure. Therefore, it can be analyzed that Muslim housing structure is better in the Civil Lines area than the old part as well as the peripheral wards of the city.

Wardwise Availability of Open Space in the Houses

Availability of open space in any form in the houses is an important indicator for the measurement of good quality housing. In the present study the nature of open space is defined by lawn/kitchen - garden/courtyard/side open space/backyard/ balcony etc. If any house has the above said space, it is being called as house with open space. This indicator has different meanings in different locations. Walled city’s wards have small courtyard type of open space whereas Civil Lines wards have open space in the form of lawn, kitchen - garden and backyard. This open space provides sunshine and fresh air quality and establishes man’s relationship with natural environment. Open space in the house gives an aesthetic and psychological comfort of high sky over head. In fact, it is the necessity of being a part of the nature.

The household open space availability has been given in fig. VII.7. The wards, which have 83 to 100 per cent households with open space, are mostly
located in the Civil Lines area, and the northern and eastern periphery. These are no.18 (Nagla Kalar), no.30 (Jamalpur), no.36 (Hamdard Nagar), no.41 (Badam Nagar), no.44 (Lekhraj Nagar), no.49 (Dodhpur), no.52 (Badar Bagh), no.57 (University Area). Dodhpur, Badar Bagh and Lekhraj Nagar also have a large house size. That is why the open space has easily been available in these wards. In the second percentage group that is 66 to 83 per cent there are only 3 wards, no.13 (Durgapuri) located in the old city center and no.31 (Firdaus Nagar), no.53 (Bhamola) in the north of the city.

Most of the old city’s wards and the peripheral wards represent medium category availability of open spaces from 49 to 66 per cent. The nature of open space in these houses is generally very small that is small courtyard or balcony. The remaining wards represent low to very low percentage of open spaces. Ward no. 1 (Sarai Deen Dayal) and no.27 (Barahdwari) do not show any open space. The average housing area is smaller in the old city’s wards. Per capita living space is also very small.

**VII.5. Hygienic Conditions of the Houses**

Hygiene is closely related with good housing quality and health of the inhabitants living there. If the homes are not kept clean and adequate steps are not taken to prevent insects etc., the homes can become infested with disease vectors. Poor hygiene leads to food and water contamination within the home. For the explanation of this aspect of the house, various indicators have been taken into consideration.

**Wardwise Availability of Cooking Place**

From the health and hygienic point of view the number and location of the cooking place is an important consideration. No proper care has been taken
into account in this important aspect of the house, although special attention should be given on it. In Aligarh city or in any class I Indian city especially with cottage industry, we have the same cooking place. For the Muslims, this is more appropriate than any other community. Four types of places have been used for the cooking purpose in the city in accordance with the socio-economic conditions of the inhabitants. These are separate kitchen, multipurpose room, verandah, and open air. The concept of separate kitchen is rare among the low to very low-income group. The following table gives us a whole view of the cooking place in Aligarh city.

Table VII.3

<table>
<thead>
<tr>
<th>Place</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separate kitchen</td>
<td>2,230</td>
<td>66.01</td>
</tr>
<tr>
<td>Multipurpose room</td>
<td>196</td>
<td>5.80</td>
</tr>
<tr>
<td>Verandah</td>
<td>770</td>
<td>22.79</td>
</tr>
<tr>
<td>Open Air</td>
<td>182</td>
<td>5.39</td>
</tr>
<tr>
<td>Total</td>
<td>3,378</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Based on primary data

The table VII.3 shows that the total number of households surveyed was 2,735 in which 3,971 families were living. There are an average 1.45 families living in a household in the Muslim habitation of Aligarh city. The total numbers of cooking places in these households were 3,378. At the same time, there were an average 1.24 cooking places per household. The above scenario indicates that the joint family system on an average exceeds over the nuclear family system. The lesser number of cooking places than the number of families also reveals that many joint families have a common cooking place as well as the common cooking. It means some houses have more than one
Aligarh City: Wardwise Distribution of Cooking Place and Household (2004-2005)

No. of Cooking Place

No. of Household

Source: Based Upon the Computation of Primary Data Generated Through Field Surveys

Fig. VII.8
cooking place due to more than one family per house while some joint families have a shared cooking place. As the table shows the formal or standard kitchen among the Muslims are only 2,230 while the verandah is used as the cooking place in 770 households. The other cooking places are multipurpose rooms with 196 cases whereas in 182 cases cooking is done in the unspecified open space. Hence 3,971 families shared 3,378 cooking places.

Figure VII.8 gives us an idea about the distribution of cooking place in different wards in comparison to number of houses. In the Muslim inhabited wards the numbers of cooking places are invariably higher than the number of households. This indicates that the joint family system exceed over the nuclear family system. This is also indicator of the economic debility of the Muslims. The line represents number of households while the bars highlight the number of cooking places. Ward no. 55 (Khai Dora) has the highest number of cooking places that is 178 over the sampled households of 100 in which 184 families are inhabited. The second highest cooking places are in ward no. 25 (Kala Mahal) that is 165 for 177 families living in 100 households. Ward no. 50 (Rasalganj) and no.10 (Shah Jamal) has 146 and 142 cooking places in 100 households each. This shows a preponderance of the joint family system with no separate kitchen like arrangement.

A thorough inspection of this figure highlights that the number of cooking places is either equal or a little more in Civil Lines wards but in the old city’s wards and the peripheral wards the cooking places are much more in numbers than the sampled households. The figure also focuses light upon the already made statement that there are more joint and extended families in the old city’s and peripheral wards in comparison to the Civil Lines wards. That is why the cooking places are also in a large number.
When, we relate this graph to the average area of the house (Fig. VII.2), we can easily make estimation about the quality of hygiene in the houses. Almost all the old city’s and the peripheral wards have only 30 to 114 sq. yards area for the houses. Per capita living space is also very small, that is, between 6 to 17 sq. yards. In the small size households the existence of more than one cooking place is not a positive indicator for the housing as well as from the viewpoint of hygienic conditions. Many of the households used open space such as verandah for the cooking purpose. Finally, more number of cooking places also indicates a housing congestion.

Sanitation and Water Supply Conditions of the Houses

Bathroom and sanitation conditions are the two very major aspects of residential structure. It is an important feature to notice that where a majority of the households consists of two or three rooms with no or inadequate open space and with no separate kitchen. Whereas, as high as 97.4 per cent households have toilets and 94.7 per cent households have bathrooms.

A figure of 3 per cent households lacking private toilet facility is located on the peripheral wards. People go to jungle or outskirts for this natural call. It was being observed at the time of survey that in the old city and in the peripheral wards many households have the manual latrine in kutchta form without the flush system. Similar, is the case of bathroom facility. About 5.3 per cent households do not have separate bathrooms. They bathe either in the courtyard of the house (both males and females) or most of the male take bath at the street tap.

The most attentive point is that the sharing pressure both for bathrooms and toilets is very high. It is more in the old city and the peripheral wards and less in the Civil Lines wards, due to small family size. The sharing pressure is
from 5 to 10 persons per toilet/bathroom and at some places it is more than 10 persons. Hence, this pressure speaks of poor housing quality in the peripheral and old city wards than the Civil Lines wards.

As far as water supply is concerned, three variables have been used for the collection of data for this indicator. They are (i) Hand pump (ii) Municipal household tap connection (iii) Street tap. The old city’s wards as well as the wards located in the periphery of the city are in a very pathetic state in terms of water supply and face an acute problem of potable water shortage. The central wards have unclean municipal water supply with yellowish colour and germs infested as well. Mostly street taps and the taps of the mosques are used for cooking and drinking water. Z-pumps and submersibles are very necessary. Several peripheral wards do not have a municipal water supply pipe line. That is why almost every house has hand pump or uses street hand pumps for very limited water availability. This is one of the important indicators of urban sprawl.

At last it can be analyzed that water supply and sanitation condition is very poor in certain old city’s wards as well as the peripheral wards. Many researches have also been done on this acute problem of Aligarh city. Besides this various programmes related to sanitation have been started by different NGO’s, and the UNICEF.

Therefore, it can be concluded that the housing quality among the Muslims is not good except in a few wards. Poor housing is common in those wards where the population is socially, educationally and economically deprived and backward. The old city’s houses with improper ventilation system are very congested. Housing pressure is also very high in these wards. The report given by UNESCO analyzed that housing stress and inadequacy is more
in low-income households and weaker sections.\(^7\) Secondly, the residential unit is also used for the industrial work due to the presence of household cottage industry. In the low-income population areas of the third world cities, the separation between home and workplace has never been very clear.\(^8\) Hence, most of the Muslim localities are suffering from severe housing congestion and inadequate spacing.

**VII.6. Nutrition, Health and Longevity Status of Muslims in Aligarh City**

"The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition", (WHO Constitution).\(^9\)

Health is an important indicator to measure the socio-economic status of any community. It is one of the major sources to understand the well being of the people. It is the most essential aspect to assess the quality of life. Good health status is related to high life expectancy, which leads to high longevity rate as well. This longevity rate is the ultimate index of quality of life. Health is broadly defined as a feeling of physical, mental and spiritual well-being and the absence of diseases and infirmities (Madhiwalla & Jesani 1997).\(^10\) Now the question arises as to how do we lead a healthy life?

The general health conditions are closely associated with the household environment. Health of the habitat influences the health of the inhabitants. Good housing with proper ventilation, sanitation and space availability provides healthy living conditions to its inhabitants, and vice-versa occurs in the bad housing characteristics. Saxena and Prakash points out that there exists

\(^{7}\) [http://www.unesco.org/most/asia4.htm](http://www.unesco.org/most/asia4.htm)


very close relationship between water, sanitation, health, nutrition and human well-being.\textsuperscript{11} Hence, there is a strong relationship between housing quality and health conditions.

**Wardwise Occurrence of Diseases**

To find out the health conditions of the people, this variable has played a major role. Various factors are responsible for a specific disease. In the present study six types of diseases have been taken into account due to their higher occurrence. These are as follows – General diseases, stomach related diseases, infectious diseases, chronic major diseases, tension related diseases and other types of diseases. Most of the diseases occur due to the poor water quality as well as the lack of adequate water supply and sanitation. Saxena and Prakash in their paper had given an estimate of the W.H.O., ascribing about 80 per cent of all diseases and sicknesses to the lack of safe drinking water and sanitation.\textsuperscript{12} Watkin Kevin found that nearly 4000 children suffered from diarrhoea because of unclean water and poor sanitation. The annual death toll from this severe disease is larger than the population of Birmingham. Unclean and dirty water is a greater threat to human civilization than the war or terrorism.\textsuperscript{13} Stress is also one of the reasons of disease occurrence in the socio-economically high standard wards, whereas water borne and sanitation associated diseases are more in the low standard wards.

In Aligarh city out of 24,947 population, 1,275 persons were found suffering from one or the other form of diseases. The number of male sufferers is 603 whereas female sufferers are 672. Figure VII.9 and its corresponding

\textsuperscript{12} Ibid.
Table VII.4 show wardwise occurrence of diseases in Aligarh city. As the figure indicates, in the very high disease occurrence group there is only one ward that is University Area no. (57). In this ward 13.61 per cent population is suffering from various diseases. Out of this 6.73 per cent are males and 6.88 per cent are females. In the next category there were three wards. These are no. 31 (Firdaus Nagar), no.30 (Jamalpur) and no.49 (Dodhpur). All the three wards are located in the Civil Lines Area of the city. Ward no. 30 represented only 9.51 per cent population suffering from diseases whereas no.31 reported 11.02 per cent population with various diseases. Dodhpur represents disease occurrence in 9.9 per cent population with 3.5 per cent males and 6.41 per cent females having various diseases.

Table VII.4

Wardwise Occurrence of Diseases in Aligarh City (2004-2005)

<table>
<thead>
<tr>
<th>Persons (in percentage)</th>
<th>Muslim population concentration wards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very high</td>
</tr>
<tr>
<td>11.109-13.61</td>
<td>57</td>
</tr>
<tr>
<td>8.607-11.108</td>
<td>30,31,49</td>
</tr>
<tr>
<td>6.105-8.606</td>
<td>2,3,36,41,43,44,58</td>
</tr>
<tr>
<td>3.603-6.104</td>
<td>10,19,23,25,47,52,53,54</td>
</tr>
<tr>
<td>1.1-3.602</td>
<td>38,50,55,59,36,59</td>
</tr>
</tbody>
</table>

Source: Based on Primary Data.

As far as the third category is concerned its occurrence can be seen in Civil Lines as well as old city’s wards. A range of 6.1 to 8.6 per cent population is being affected by various diseases. Most of the old city’s wards as well as the peripheral wards reveal a lower rate of disease occurrence because the percentage population infected from the diseases is very less. It is likely
Aligarh City
Wardwise Occurrence of Diseases among Muslims
(2004-2005)

Index Percentage

- 11.109 - 13.61
- 8.607 - 11.108
- 6.105 - 8.606
- 3.603 - 6.104
- 1.100 - 3.602
- Nil

Source: Based Upon the Computation of Primary Data Generated Through Field Surveys

Fig. VII.9
that the percentage population reporting various diseases is low with traditional population of the old city. It is from 1.1 to 6.1 per cent only. Almost all the central wards show a very meagre percentage of population affected by various diseases. Although the population of these ward is also suffering from various diseases but they do not take care of their diseases. They hide their diseases. The reason behind this is that despite the illnesses they have to work hard for their daily livings. Therefore, they take their diseases very easy. That is why there is lesser complaint of disease occurrence among the wards of low socio-economic status.

It is clear from the above given data that those wards, which are socio-economically developed, have more of disease occurrence. Various studies have also shown that rich and well-placed strata complained of illness more often than the poorer strata.¹³

The occurrence of diseases is due to various factors such as biological, physical and social. In the present study physical and social factors have been taken into account for the explanation of diseases. Dutt and Dutta also found that the physical factors, culture, political upheavals and the process of development and modernization played a major role in the occurrence and spread of diseases in South and Southeast Asia including India.¹⁴ As it is said before that there are six types of diseases, which have been clubbed into two broad groups. (i) Diseases which occur due to water, sanitation or unhygienic problems, (ii) Diseases that occur due to stress and tension.


Source: Based Upon the Computation of Primary Data Generated Through Field Surveys

Fig.VII.10.a
Aligarh City: Wardwise Distribution of Various Diseases
(2004-2005)

Source: Based Upon the Computation of Primary Data Generated Through Field Surveys

Fig VII.10.b
Figures VII.10.a and VII.10.b represent wardwise percentage of different types of diseases. As we know that 5.11 per cent population has been reported suffering from one or other type of diseases. Out of this 5.11 per cent, 15.53 have general sickness, 2.98 have stomach diseases, 17.02 per cent suffer from infections diseases, 26.20 per cent with chronic major diseases and 20.71 per cent face tension related diseases and 17.56 with other type of diseases. It is quite clear from the above given figures of percentages that most of the population either suffers from chronic major diseases (heart, cancer, tumour, mentally retarded and arthritis) or tension diseases (blood pressure, sugar and depression). Ward no 30 has the highest percentage of general diseases (fever, cold, cough, body ache, headache, weakness, agedness, breathlessness, small pox, polio) with 63.22 per cent whereas ward no. 45 with 50 per cent share represents second category of occurrence of general diseases. Ward no. 14 has only stomach related diseases and that is 100 per cent. In ward no. 20 and no. 27 a large of percentage of people are affected by stomach related disease.

The group of infectious diseases including tuberculosis, etching, respiratory and malaria is the next, which can be found in both the figures. Out of forty selected wards 29 wards represent infectious diseases. This share is highest in ward no. 6 (Jaiganj, old city) with 66.67 per cent and it is 57.14 per cent in ward no. 58 (Manik Chowk, old city). Most of the wards affected by this category of disease are located in the old city or on the periphery of the city.

The next disease group consists of the chronic major diseases (heart, paralysis, brain tumour, cancer, arthritis, mentally retarded diseases) and this group of diseased is the most prevalent. Although the percentage share varies
but except eight wards, the diseases of this group can be seen almost in every ward of Aligarh city. Ward no. 16 (Nagla Masani) with 71.43 per cent shows the highest occurrence of these diseases. Furthermore there are two wards no.5 (Sarai Bala) and no.52 (Badar Bagh) which represent the same share of 66.67 per cent. These chronic diseases are the worst in their forms because they eventually lead to the death.

The tension related diseases are blood pressure, depression, and diabetes. Out of 40 selected wards only 25 wards have this group of diseases. Ward no. 49 (Dodhpur) shows the highest percentage share of this disease, which is 58.82 per cent. This is being followed by ward no. 40 (Begpur) by 50 per cent and no.41 (Badam Nagar) 36 per cent, all are located in Civil Lines area. The most important observation related to this disease can be noticed in the graphs that the share of this disease is meagre in the wards located in the old city as well as on the western periphery of the city, while it is more in the Civil Lines wards as well as the North and Eastern peripheral wards. This is due to the fact that in the Civil Lines wards the population has a higher socio-economic status in comparison to old city's wards. Still, however, the predominance of the tension related diseases in the Civil Lines wards may be attributed to the eligibility-aspiration-availability-achievement gap. A higher prevalence of such diseases may also be due to the injudicious and non-congenial working environment. The population of these wards has a high education and income level. This higher status is more prone to the tension related diseases. On the other hand in all these wards there is a lesser occurrence of infectious diseases, which mostly take place due to unhygienic conditions.
The next category is the other diseases including (white spot, cataract, eye and ear problem and women specific diseases). The share of other diseases is more in the old city as well as the peripheral wards in comparison to Civil Lines wards.

Finally, it can be concluded that the occurrence of diseases is specific to the socio-economic location or environment in case of certain diseases such as blood pressure, stress, depression, diabetes, respiratory diseases like asthma and especially general sickness. The diseases induced by tension are more likely in the Civil Lines wards or the higher income wards having good housing structure and higher status of living in comparison to low quality housing and wards of lower standard of living. Hence, there is a complex relationship between housing structure and occurrence of diseases. Disease specification still, however, depends upon the quality of housing.

**Nutritional Levels among the Muslims in the City**

Nutrition, housing, and health are intimately related. Good housing quality leads to good health and good health is also the result of better nutritional availability. Nutrition is a dynamic process in which the food consumed is utilized for nourishing the body. The concept of nutrition is well developed among the educated and higher income group. Rahman and Rao examined the effect of education and income levels on the nutritional status of the adult males and females in Hyderabad city. Both Hindus and Muslims were shorter in height and lower in weight than the W.H.O. standards and the people of the developed countries like U.K. They also assessed that higher the socio-

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economic status of the subjects, higher was the degree of improvement in the measurements and indices of nutrition. It was also concluded that higher level of education either with enhanced level of income or even at the same level of income, demonstrated improvement in the nutritional status of the adults.\textsuperscript{16}

It is similar in case of Muslims in Aligarh city. The wards located in the Civil Lines near the University Area with a higher education and income take better nutritious and balanced diet in comparison to the old city and the peripheral wards. It was observed at the time of survey by the researcher that most of the old city’s wards and the peripheral wards do not have a proper dietary system. They take highly inadequate breakfast. Some of them do not have even a cup of tea and a slice of bread. In the lunch and dinner they only have a single vegetable or red meat or rice or dal (pulse). They do not afford all these things at a time. This shows a low nutritional level among them. Whereas in the Civil Lines wards the people have more than one food item in lunch and dinner and have a proper breakfast. Sandiford and et al. also analysed that child’s health, nutrition and survival is closely related with mother’s literacy, schooling, income and wealth.\textsuperscript{17} Therefore, the level of nutrition is closely related with education and income.

**Longevity Index of Muslims in Aligarh City**

Longevity is a reflexive index of the quality of life and the social well being of a community. Table VII.5 shows that the longevity percentage of Muslims in Aligarh city is dismally low.


Table VII.5
Sex Wise Muslim Longevity in Aligarh City (2004-2005)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampled population</td>
<td>24,947</td>
<td>12,617</td>
<td>12,330</td>
</tr>
<tr>
<td>Percentage Sampled</td>
<td>100.000</td>
<td>50.575</td>
<td>49.424</td>
</tr>
<tr>
<td>No. of 60-65 Years</td>
<td>1,030</td>
<td>440</td>
<td>590</td>
</tr>
<tr>
<td>Percentage 60-65 Years</td>
<td>4.128</td>
<td>3.487</td>
<td>4.785</td>
</tr>
<tr>
<td>No. of 65 Years and above</td>
<td>386</td>
<td>147</td>
<td>239</td>
</tr>
<tr>
<td>Percentage 65 Years and above</td>
<td>1.547</td>
<td>1.165</td>
<td>1.938</td>
</tr>
<tr>
<td>Percentage Longevity Decline or Death</td>
<td>62.524</td>
<td>66.590</td>
<td>59.491</td>
</tr>
</tbody>
</table>

Source: Based on the computation of primary data generated through field survey.

Out of a total sampled population of 24,947 persons only 1,030 persons were reported in the old age group of 60-65 years while only 386 persons were found in the above 65 years of age group. This represents only 4.128 per cent Muslims in the old age group of 60-65 years and a meagre 1.547 per cent Muslims in the above 65 years age group. Such a meagre percentage of Muslim population in the old age group reveals an alarming scenario of a fragile Muslim social well being even in their index city. In view of a general scenario of increasing longevity in most of the developing countries, particularly India, 65 years of age is no longer considered an old age. Moreover, in various public sector undertakings 65 years is a job retirement age.

Since, Muslims of Aligarh city have only 0.47 per cent public sector government employment other than their employment in Aligarh Muslim University, they are largely unemployed and heavily underemployed and sustain in the unorganized sector. They are mostly daily and weekly wagers. Hence, their nutrition, health, housing and hygienic conditions are poor. These,
Aligarh City
Wardwise Longevity at 65 Years and above Age (2004-2005)

Source: Based Upon the Computation of Primary Data Generated Through Field Surveys

Fig.VII.11
conditions have eventually taken an ultimate toll upon their longevity. The percentage longevity decline of Muslims from the age group of 60-65 years to above 65 years age group is very sharp. There is 62.524 per cent longevity decline in a small gap of the age group. The male longevity decline is even higher by 66.590 per cent. Though the female longevity decline is comparatively smaller but still it remains high by as much as 59.491 per cent. This is a highly alarming problem in the social sustainability and social well being of the Muslim community in Aligarh. This indicates a drastically high death rate just after the age of 65 years among the Muslims.

The female longevity scenario among the Muslims is relatively a shade better against their male counterparts. Muslim females represent 4.785 per cent longevity as against the male percentage of 3.487 in 60-65 years age group. Similarly, the female percentage of 1.938 is a higher longevity against the male percentage of 1.165 in the above 65 years age group. Such a higher female longevity scenario despite a lesser nutritional availability to them indicates that women are biologically stronger and resistant to the odds. This also indicates that in the Muslim families of Aligarh city there are more numbers of living grandmothers than the live grandfathers.

The geographical distribution of Muslim longevity in figure VII.11 shows a wide disparity between the Civil Lines wards of highly educated and better employed citizens and the less educated and less employed people of lesser awareness towards nutrition, health and hygiene in the old city. Out of 44 Muslim inhabited wards of Aligarh city only 8 wards depicted above 2 per cent longevity. Of these only two wards were in the old city and 6 wards were in the Civil Lines. As many as 15 wards have less than 1.5 per cent longevity among the Muslims. It is further shocking to note that 13 wards did not represent any
man or woman in the longevity age group. As longevity is the cumulative index of quality of life and well being, one can imagine the highly precarious conditions that most Muslims of Aligarh are living in. Hence, this finding proves that the longevity or death is socio-economic rather than being natural.

VII.7. Family Structure, Housing and Health in Aligarh City

There is a definite association between the family structure, housing and health. Family structure may be the cradle of illness or health. Family, which is the basic institution of well being, affects every aspect of human life. If we compare the present family structure with the housing conditions one can easily find a relationship among them in Aligarh city.

There are following wards where the average family size is very small and occurrence of nuclear family is high. These are ward no. 14 (Zameerabad), no.30 (Jamalpur), no.44 (Lekhraj Nagar), no.49 (Dodhpur), no.52 (Badar Bagh), and no.57 (University Area).

In figure VII.2 the wards with very large, large and medium area of the house are no.49 (Dodhpur), no.44 (Lekhraj Nagar), no.52 (Badar Bagh), no.57 (University Area) and no. 43(Zohra Bagh) respectively. The wards with very small family size correspond with the very large, large and medium size house. This can also be seen in case of per capita living space, open space availability, modern tiled houses and the like. All the above said variables are the indicators of good housing quality. Hence, small family coupled with nuclear family system avails the good quality housing in comparison to joint families and large family size.

Similarly, health association can also be seen with the nature of family. Although it is not as strong as the housing quality, but to a certain extent, it is associated with the family size and type. The wards located in the old city and
on the periphery are more prone to illness and diseases; mostly general sickness, stomach related diseases, infectious diseases and the chronic major diseases. While the Civil Lines wards are more prone to tension related diseases.

The diseases, in general, are associated with the large family size and the poor housing quality. Because most of them are the communicable diseases, which spread in the whole family due to congested houses and large family size. Whereas, tension oriented diseases are not related with the family and the housing condition. Such diseases are prevalent in the higher socio-economic strata where people have ego larger than life size. The tolerance level is generally low among the elites and the authoritative people. Finally, it has been assessed from the above discussion that family size and type and the housing condition play a decisive role in the health and quality of life in a geographic location.

VII.8. Correlation between Family Structure and Housing Variables

Table VII.6 shows a relationship between the variables of family structure and the variables of housing condition. Variable average household size is negatively correlated with per capita living space ($r = -0.564$) and average area of the house ($r = -0.407$) at 0.01 level of significance. Therefore, an increase in household size would lead to a decrease in the availability of living space.

The variable average family size is also negatively correlated with the per capita living space ($r = -0.512$), average area of the house ($r = -0.454$), open space availability in the house ($r = -0.388$) and longevity ($r = -0.481$) at 0.01 level of significance. It means an increase in average family size would enhance the problem of space deficiency. The longevity index would also
decrease with an increase in the average family size. This happens due to a higher post maternal death rate among the females as well as the accidental and disease oriented death rate among the male adult in order to earn the living for the large family size. A large family size depicts a higher fertility which further leads to an increase in the minors’ population and a decrease in the senile population.

Single parent family has no significant relationship with the other variables of the housing status. It means that this family system does not significantly influence the housing structure.

Table VII.6

Correlation between Family Structure and Housing Variables in Aligarh City (2004-2005)

<table>
<thead>
<tr>
<th></th>
<th>Per capita living space</th>
<th>Average house area</th>
<th>Cemented</th>
<th>Open space</th>
<th>Longevity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average household size</td>
<td>-.564**</td>
<td>-.407**</td>
<td>-.071</td>
<td>-.129</td>
<td>-.129</td>
</tr>
<tr>
<td>Average family size</td>
<td>-.512**</td>
<td>-.454**</td>
<td>-.109</td>
<td>-.388**</td>
<td>-.481**</td>
</tr>
<tr>
<td>Single parent family</td>
<td>-.048</td>
<td>-.117</td>
<td>.010</td>
<td>-.274</td>
<td>-.179</td>
</tr>
<tr>
<td>Nuclear family</td>
<td>.488**</td>
<td>.344*</td>
<td>.033</td>
<td>.123</td>
<td>.187</td>
</tr>
<tr>
<td>Extended nuclear family</td>
<td>.023</td>
<td>-.003</td>
<td>.027</td>
<td>-.212</td>
<td>-.187</td>
</tr>
<tr>
<td>Joint family</td>
<td>-.278</td>
<td>-.180</td>
<td>-.021</td>
<td>.085</td>
<td>.080</td>
</tr>
<tr>
<td>Extended joint family</td>
<td>-.308*</td>
<td>-.197</td>
<td>-.047</td>
<td>.006</td>
<td>-.120</td>
</tr>
<tr>
<td>College/ University education</td>
<td>.617**</td>
<td>.605**</td>
<td>.359*</td>
<td>.304*</td>
<td>.588**</td>
</tr>
<tr>
<td>Professional/ Technical education</td>
<td>.776**</td>
<td>.803**</td>
<td>.518**</td>
<td>.566**</td>
<td>.659**</td>
</tr>
</tbody>
</table>

Correlation is significant at 0.01 level. Correlation is significant at 0.05 level.
Source: Based on the computation of primary data generated through field survey.
Nuclear family system is positively correlated with per capita living space ($r = 0.488$) at 0.01 level of significance. It is also positively correlated with the average area of the house ($r = 0.344$) at 0.05 level of significance and with the open space in the house ($r = 0.123$) with no significant relationship. It means an increase in the nuclear family system would provide a positive availability of the living space. The variable extended nuclear family does not have any significant correlation with any variable of housing status.

Joint family is negatively correlated with per capita living space ($r = -0.278$) and average area of the house ($r = -0.180$). However, no significant relationship exists between these variables. Extended joint family is negatively correlated with the per capita living space ($r = -0.308$) at 0.05 level of significance. It is also negatively correlated with the average area of house ($r = -0.197$) with no significant relationship. The correlation table clearly depicts that only the nuclear family system would lead to a good housing structure and quality. All the other family systems have a negative association with the housing status among the Muslims.

The variable college/university education is positively correlated with per capita living space ($r = 0.617$), average area of the house ($r = 0.605$) and longevity ($r = 0.588$) at 0.01 level of significance. It is also positively correlated with cemented house ($0.359$) and open space in the house ($r = 0.304$) at 0.05 level of significance. Similarly, in case of professional/technical education, the variable is positively correlated with the per capita living space ($r = 0.776$), average area of house ($r = 0.803$), cemented house ($r = 0.518$), open space ($r = 0.566$) and longevity ($r = 0.659$) at 0.01 level of significance.
Education is an important indicator for the betterment of any community and society. It is a medium of development as well as the advancement of a Nation. Education imbibes the sense to live a healthy life. It inculcates a perception of good and clean housing quality among the people. It is because of this reason higher education level has a positive relation with the good housing status. It means the higher level of education is helpful to enhance the availability of space as well as its efficient utilization. It also plays an important role in understanding the significance of open space in the life and well being.

Correlation between the Variables of Employment, Income and Housing

The table VII.7 highlights the relationship between the variables of employment and housing conditions. The variable public employment is positively correlated with the per capita living space ($r = 0.884$), average area of the house ($r = 0.876$), cemented house ($r = 0.437$), open space ($r = 0.649$) and longevity ($r = 0.731$) at 0.01 level of significance. It means that the public employment is the most important indicator for good housing quality. Private jobs are also positively correlated with housing variables. However, the relationship is not significant.

In case of industry and trade there exists a negative correlation with the per capita living space ($r = -0.083$) and average area of the house ($r = -0.055$) with no significant relation. It is also negatively correlated with the open space ($r = -0.366$) at 0.05 level of significance. The reason behind this is that the Muslims, who are engaged in industry and trade, mostly have their very small karkhanas (manufacturing units) at their own residence. Here one can imagine the entrepreneurial status which is not even up to a level of cottage industry. That is why their housing quality is poor without any incentives of open space.
as well as the deficiency of space. Business employment is positively correlated with the housing variable with no significant relationship except open space \( (r = 0.323) \) at 0.05 level of significance. The variable labour class is negatively correlated with the per capita living space \( (r = -0.658) \), average area of the house \( (r = -0.707) \), cemented house \( (r = -0.535) \), open space \( (r = -0.525) \) and longevity \( (r = -0.601) \) at 0.01 level of significance. The result clearly depicts that the labour class has the poorest quality of housing. In comparison to this public employment has the best quality of housing.

The most important indicator for the measurement of housing quality is related to income. The income variables directly influence the housing status of any community. The table explains this relationship. The variable average income of the family is positively correlated with the per capita living space \( (r = 0.983) \), average area of the house \( (r = 0.968) \), cemented house \( (r = 0.521) \), open space \( (r = 0.475) \) and longevity \( (r = 0.745) \) at 0.01 level of significance. The variable per capita income is positively correlated with the per capita living space \( (r = 0.989) \), average area of house \( (r = 0.964) \), cemented house \( (r = 0.483) \), open space \( (r = 0.492) \) and longevity \( (r = 0.755) \) at 0.01 level of significance.

Similarly, the variable average family savings has a positive correlation with the per capita living space \( (r = 0.968) \), average area of the house \( (r = 0.947) \), cemented house \( (0.437) \), open space \( (r = 0.460) \) and longevity \( (r = 0.734) \) at 0.01 level of significance. Income which is the major source of higher standard of living including education, good housing and health, establishes a strong correlation with the housing variables. Development can largely be visualized with a high income level which ultimately leads to good economic structure.
**Table VII.7**

*Correlation between the Variables of Employment, Income and Housing in Aligarh City (2004-2005)*

<table>
<thead>
<tr>
<th></th>
<th>Per capita living space</th>
<th>Average household area</th>
<th>Cemented</th>
<th>Open space</th>
<th>Longevity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public employment</td>
<td>.884**</td>
<td>.876**</td>
<td>.437**</td>
<td>.649**</td>
<td>.731**</td>
</tr>
<tr>
<td>Private jobs</td>
<td>.191</td>
<td>.175</td>
<td>.223</td>
<td>.204</td>
<td>.080</td>
</tr>
<tr>
<td>Industry and trade</td>
<td>-.083</td>
<td>-.055</td>
<td>.141</td>
<td>-.366*</td>
<td>-.153</td>
</tr>
<tr>
<td>Business</td>
<td>.027</td>
<td>.114</td>
<td>.198</td>
<td>.323*</td>
<td>.263</td>
</tr>
<tr>
<td>Labour class</td>
<td>-.658**</td>
<td>-.707</td>
<td>-.535**</td>
<td>-.525**</td>
<td>-.601**</td>
</tr>
<tr>
<td>Average family income</td>
<td>.983**</td>
<td>.968**</td>
<td>.521**</td>
<td>.475**</td>
<td>.745**</td>
</tr>
<tr>
<td>Per capita income</td>
<td>.989**</td>
<td>.964**</td>
<td>.483**</td>
<td>.492**</td>
<td>.755**</td>
</tr>
<tr>
<td>Average family saving</td>
<td>.968**</td>
<td>.947**</td>
<td>.437**</td>
<td>.460**</td>
<td>.734**</td>
</tr>
<tr>
<td>Longevity</td>
<td>.745**</td>
<td>.789**</td>
<td>.489**</td>
<td>.543**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*Correlation is significant at 0.01 level.  **Correlation is significant at 0.05 level.*

Source: Based on the computation of primary data generated through field survey.

The variable longevity has a positive correlation with the per capita living space (r = 0.745), average area of the house (r = 0.789), cemented house (r = 0.489) and open space (r = 0.543) at 0.01 level of significance. It means that the good housing conditions would lead to higher longevity rate because it provides congenial environment to the senile population. This is helpful in enhancing the longevity index which is the ultimate index of development.