CONCLUSIONS
The main conclusion that arises from the foregoing analysis is that socioeconomic status contributes a great deal towards the residential structure and the quality of life. The lower the socioeconomic status, poorer the residential structure and the quality of life and vice versa.

The city of Aligarh was chosen for this study because earlier work on various aspects of social environmental problems has been conducted in large metropolitan cities only and little attention has been given to smaller cities. More than 70 per cent of urban population of India reside in small cities. These small cities are no longer small and by international standards they would qualify to be big cities, if no mega cities. They are also fast developing big problems and there problem should be identified and studied thoroughly. So, it was taught worth while to study the social environmental problems occurring in this city.

The author has made extensive use of primary data which was drawn from a comprehensive door to door survey of 2,268 households in Aligarh city. In the foregoing chapters we have tried to analyse our data to test the hypothesis that we have set before us while undertaking of this work.
The general conditions of the study area as a whole revealed that:

In terms of residential spatial pattern and quality of life, the city space of Aligarh exhibits three distinct zones: the old city, the civil lines and the outskirts of the city.

1. The old city which forms the core of the city exhibits a metamorphosed form of its original traditional character under the pressure of crowding, under development and poverty. The Physical structure of the old city preserves, more or less, its original character reflecting traditional style of living. Nevertheless, as a consequence of increasing concentration of population in this part due to natural growth as well as immigration, fragmentation of big houses into smaller and smaller units is taking place, dwellings are multiplying and extension of buildings is carried on resulting in the disappearance of all the open-space around the buildings. However, the old city is not a homogeneous zone, on the basis of residential characteristics and quality of life, the old city exhibits three distinct areas: high class residential areas; middle class residential areas; and low class residents area. In the former, the majority of residential belong to the traditional business elites both Hindus and Muslims. Qualitatively these wards are
better off and differ from rest of the wards in terms of housing condition and infrastructural facilities. Congestion and crowding are relatively less and exclusive housing facilities are not uncommon. Owner occupancy is common and room density is less. Due to relative affluence these quarters are well provided with amenities as water supply, electricity, modern baths and latrine, gas etc. The livability despite lack of open spaces is reasonably good.

The middle class residential areas generally flank the high class residential areas and form a transitional zone between low and high class residential areas. The residents of these wards include a variety of occupational and cultural groups. A majority of them are engaged in services. Many of them are small shop owners and engaged in petty trade and business. Houses in this area are generally brick houses and many of them are quite old. Housing congestion and overcrowding too is beyond permissible limits. Exclusive housing facilities are lacking here. However, level of infrastructural facilities and other amenities can be put as moderate.

The low class residential area in the old city is located centrally. In many of these wards Muslim population occupies a dominant position. People here is generally engaged in low paid services. Housing congestion, old dilapidated buildings, lack of open
spaces, narrow and winding lanes are physical characteristics of this part. Drainage is poor and rain water pools here during monsoon and breeds mosquitoes. General sanitary conditions are also sub-standard. Renter occupancy, sharing of living space and lack of housing facilities are wide spread in this part of the old city, infrastructural facilities and amenities are greatly lacking. Due to meagre income of the residents, water supply, electricity and other amenities are generally lacking here. The living conditions here in this part can at best be described as sub-standard.

2. Delhi-Calcutta railway line separate the old and new parts of the city. The north-eastern part as a so called civil lines situation in this part of the city is ecologically balanced. This area houses administrative, educational and medical facilities east of railway line. This area represents a structural divide. The residential set-up in this area, except in a few pockets, is quite sparse are meant for British administrators, businessmen, missionaries and many other high placed Britishers. This area is occupied by high government officials, high class professionals, managerials, businessmen and other wealthy people. These areas are characterises by spacious houses. The concept of open spaces, parks and playground (not under municipal provision) is distinctly visible in this zone.
3. The parallel city as distinct from old city and civil lines comprises of hutment settlements. These settlements of the socially and economically down trodden people are situated on the southern and south western edge of the city. The occupants in the parallel city are generally derived from rural areas. These are the poorest people. The poverty of the inhabitants in the parallel city prevents them from affording running water and electricity into their dwellings. Recourse is made from municipal water supply, and to oil lamps for lightning. The sewage and limitation facilities, the responsibility of municipal corporation, are completely lacking in these areas. In this area there is lacking of Municipal facilities. The quality of life in these areas of the city can be described as subhuman.

Regarding the different problem areas, specific conclusions that have implications on policy and implementation may be drawn:

**Socio-Economic Status**

The foregoing study reveals that there is a wide variation in the socio-economic status of the people living in Aligarh city. This is due to variables like income, education and occupation and appears to a dimension of socio-economic status. The high factor scores are more than +1.25 standard deviation from the mean (0.0). Wards showing factor score less then -1.25
standard deviation are grouped under low factor score and Medium Status ranges from -1.25 to +1.25 standard deviation. It is seen that eleven wards show high socio-economic status, while six ward, show low level and twenty three wards show medium level of socio-economic status. Wards in the North east show high socio-economic status these are ward number 3, 6, 7, 8, 9, 10, 11 while ward number 27, 37, 34 and ward number 40 are in the old city. Wards in the North east comes under the socio-economic status because these wards are inhabited by engineer, executives, managerial, professionals and high class businessmen and university teachers. The income of the people living here is very high, much of the differences in income levels can be related to the occupational status of the people. The population of these areas are highly educated as we all know education enhances human well-being by broadening the outlook and helping one to understand the complexities of life because usually, the literate population are the one who get better employment and in turn economically better off than illiterates. Ward number 27, 34, 36 and 40 are inhabited by rich traders and businessmen. Rich traders who live in the old city do not want to shift to better localities because of sentimental reason and ancestral ties, one more reason is that they are living in the first and second floor while on the ground floor their
business is flourishing. Medium level of socio-economic status are found in the west extending to south and east. Low socio-economic status wards are ward number 22,24,26,31,37 because the population living here have lower jobs in the government offices or petty shopkeepers. In most of the wards the population is uneducated or illiterate because they can't afford to send their children to the school and also they cannot even afford the tutor at home because of their poverty and thus the drop-out rate is very high.

The government should provide basic education which includes to provide low cost education not necessarily to only school children but the target groups include youths and adults.

Family Status

The result shows that 19.24 per cent out of total variance comes under the family status. This means that is closely related with the variables of size of household, age structure (15-59 yrs of age) and sex ratio. The rotated factor score shows that the highest loading is by average size household (0.87783) it is followed by large household (0.82087) and dependency ratio (0.82068) and negative loading by small households points toward large family size. Medium level (i.e. moderate factor scores) covers fifteen wards which extends from North to West. This area is inhabited by
medium size household, with a relatively low proportion of children, more or less balanced sex ratio because they are comparatively educated than the above for said wards and they are aware of the measures of family planning. The low factor scores (i.e. high family status) are in both old and new areas of the city. Ward number 13, 21, 25, 26, 36, 38, 40 which are in old city have moderate or high socio-economic status. Ward number 3, 4, 5, 6, 7, 8, 9, 10 are in north east of the city which comes under the low family status because in these wards the families are small and of unitary type because they are educated. During the field survey in Aligarh city, government and local inhabitant family planning training camps were seen so in there wards low family status is found because they are adopting the family planning methods. The majority of the residents of these wards belong to high occupational status so they are modernised, educated and very well off therefore, it is natural these wards are characterised by small family and small number of the children, low fertility and low sex ratio all emphasising the modernity of the family.

The high factor score (i.e. low family status) are concentrated in the core covering a large part of the old city because in these wards most of the houses accommodate more than one family. The household have a large number of children and high fertility and dispropotinate sex ratio.
Local bodies should be involved in effective measures for controlling population growth and reduction of family size.

Housing Status

House occupancy, size of houses and certain occupational variables load comes high. This factor signifies to be a dimension of housing status. The highest loading by renter occupied (0.81777) together with positive loading by small dwelling and negative loading by large household reveals that the living space is shared by a large number of persons in small dwellings. The high factor score means that size of houses or living space is small characterised by renter occupation and vice-versa. Twenty two wards show medium level of housing because this zone houses educated well placed government offices and as well as indigenous wealthy people engaged in business and trade. Thus, renter occupancy on the one hand and large dwellings on the other accounts for a medium level of housing status. Three wards of old city are placed under high housing status because they are economically well off and have large dwellings while ward number 3, 6, 7, 8, 10 are the areas of high socio-economic status, renter occupancy is comparatively high while size of houses are large. They have a separate bedroom for every member of the family because these people are aware of hazardous effect of overcrowding and congestion on the health of a person.
The wards of the old city including ward number 16, 18, 22, 26, 31, 37 and 39 and one in southern periphery i.e. ward number 32 show high factor score means low housing status because the houses of these wards is having one or two room only and in this one room houses more than one family resides, not only this most of the houses also have animals like goat which also accommodate in the same room. The degree of overcrowding is high and the number of unit area per persons is very low and this have adverse effect on the health of the residents.

The government should provide housing to the target group engulfs any type of shelter permanent in nature.

Ethnic Status

The high factor score on ethnic status which dimension means that proportion of Muslim population is high. City centre appears as an area of Muslim dominance as it scores high in this factor. The distribution of high negative scores i.e. high proportion of the Hindu population is found in the adjacent wards of the old city and peripheral wards of high socio-economic status, where segregated pockets the the rest of the major part of the city have a moderate level of segregation because they include almost proportional population of the two communities which live in mohallas of these wards.
Dominance of Hindu and Muslim population in any area is because of socio-cultural variations, like Muslims want to live in Muslim dominance localities because they have meat shops, mosques, urdu teaching schools etc., while Hindu community similarly prefer to live in those localities where their customs and cultural aspirations are fullfilled, same as in case of others which include sikhs and christians. The segregation between the Hindu and Muslim localities is also because of frequent communal riots in Aligarh city become one of the most sensitive district of India. So, to be safe Muslims prefer to live in Muslim localities and Hindu prefer to live in Hindu Mohallas. During the survey it is seen that Sikhs and christians have separate colonies. High loading by the variable craftsman makes a clear distinction between Muslims and Hindus because traditionality Muslims in India largely had either been rulers or craftsman partonised by the rulers. Other workers load moderately but significant part of their population is engaged in unidentifiable menial occupants. Hindu population has always been engaged with trade and commerce. The variable sales workers load moderately high and negative. The category includes owner of shops and stores and their workers. While negative loading by the variable clerical workers points a lower level of education among Muslims. Trade and
clerical occupation are characteristic feature of middle class Hindus population. Fertility rate loads moderate signifies the fact that fertility rate or natural growth rate of Muslim population is generally higher than that of any other communities because low incomes, fear of decrease and religious restrictions on the adoption of family planning, non-vegetarianism and high fecundity helps to the high fertility rate among Muslim population. Low female literacy among Muslim distinguishes from the rest of population low level of socio-economic development and system of pardah (female seclusion) which almost found among middle class Muslims. The above fore said lines make a clear distinction or segregation between Hindu and Muslim population in the Aligarh city as revealed by the sampled households.

Material and Housing Condition

This dimension of quality of life places emphasis on the material possession like TV ownership, Video ownership, Refrigerator ownership, Washing Machine ownership etc. and the housing environment against which the livability of the habitat can be judged. All these variables of material possession loads high but negatively while nurseries also load negatively (-0.54281). Their loading is not very high yet it is significant enough to suggest negative associations of
educational facilities with this factor. Wards scoring high on this factor are those where level of material status is low and housing facilities are poor. On the contrary, wards scoring low are those where affluent population lives in exclusive houses provided with good facilities. Out of 40 wards eight wards exhibit high factor scores i.e. low material and housing condition. Twenty one wards show medium standard while eleven wards exhibit low factor scores which reflects on this high material and housing condition. Excluding ward 14,36 all other wards with high standard are found away from the city centre towards east, 3,5,6,7,8,9,10,11,12. In these wards the sampled households have big spacious houses with all luxuries because most of the people living in these areas have a high social and occupational status and so houses are well constructed and they have their own separate kitchen with all modern kitchen appliances like mixer grinder, L.P.G. Gasstove, oven, cooking range, microwave etc and separate European style bathrooms. A comparison of this distributional pattern of the material and housing standard suggests that this dimension of the quality life is strongly correlated with the socio-economic and housing status of the population. The wards in the old city presents material and housing standard that ranges from low to moderate with few exception of high material status. The
analysis revealed that ward number 22, 24, 26, 31, 32, and ward number 37 they have low socio-economic status because income is one of the most important factor which determines the standard of living of the people. Purchasing power of the people is determined largely by income. Infact money is able to buy man all his needs. Poor people don't have their own separate kitchen and bathrooms they have to share kitchen and bathrooms with others, while some people take bath along road side. Poor people cannot satisfy his basic needs if he is given additional income, he will be able to satisfy some of his urgent needs and thus increase his well-being.

The organisation with the housing sector, (barring perhaps the slum clearance board and the slum wings of municipal corporation) do not show much sensitivity in the urban poor, infact, owing to financial and administrative stipulations, most of the programs tend to exclude the poor. The government has not been able to provide minimum housing facilities to the poor. Even the most generous schemes -- EWS (economically weaker sections) founded by HUDCO (Housing and Urban Development Corporation) under which minimum sized house of 20 square meters are provided on a hire purchase basis requires the payment on installments amounting to 20 per cent or more of the total expenditure household below the poverty line. This is definitely beyond their
affordability. These agencies must therefore reduce to their costs by redesigning their housing schemes and made them affordable to the poor. This can be achieved through the construction of one room tenements with common space and shared water supply and bathroom facility. These should, so far possible to taken up with the existing slums so that there is no dislocation of the people from their place of work. Given the high price of land, two or three storied structures would often work out to be economical. The major thrust of the public housing agencies should, therefore be on these programmes. A few such programmes can also be taken up in location at the city periphery or beyond it.

Territorial Stress

Territorial stress is mainly determined by seven variables namely number of kitchens, number of bathrooms, ferro-concrete and brick houses, population per room, room density ratio, congestion ratio and population density. High factor scores by wards reveal high territorial stress, there in vice-versa sixteen wards are characterised by a medium level of over crowding and congestion, twelve wards show high territorial stress, and twelve wards show low territorial stress. The wards exhibiting low territorial stress i.e. low population density and low congestion are concentrated in the eastern and western periphery
because ferro-concrete houses are generally spacious
provided with all housing facilities and occupied by
small house holds. The western periphery wards show low
territorial stress because due to sheer size of the
wards. Medium level wards of congestion is because
quality of houses is moderate and houses are not small
the resulting values of population density and housing
congestion is moderate so these wards emerge a medium
territorial stress.

The centre of the city show over crowding and
congestion because the houses are small, condition of
houses are poor and crowding in houses is woefully high.
Density of population is very high. These houses are not
sparsely located. Houses in the old city are old and
commonly lacking in facilities and are shared by many
households, ward number 22,26,31,32,37 their income is
very low they are unable to live in decent dwellings.
Population makes a great impact on the living conditions
of the people because density and crowding do have an
impact on human social behaviour, particularly on inter-
personal relations. It is commonly known fact that high
density conditions do effect a person and overcrowding
leads to disturbances as there will be a noise thus
people cannot fully concentrate on their work or study
neither can take rest. Overcrowding also leads to lack
of privacy. All these do effect a persons well-being.
Thus density conditions inside houses are important because they help in determining crowding figures which are responsible for increasing or decreasing human well-being.

**Amenities and Infrastructure**

This factor explains 16.38 per cent variance of the quality of life in Aligarh. It can be described as the dimension of overall quality of life variables representing all the five sets of variables namely material status, health and nutritional status, cultural level, housing standards and territorial stress load significantly on this factor. Considering high positive loading on this factor are by facilities like telephone connection (0.94108), Electric connections (0.87270), water connections (0.77092) and gas connections (0.71100). Open spaces are also positively associated with this factor. The low positive associations of the variables of material status with this factor are significant enough to point out that a good environment in terms of amenities and infrastructure as well as quality of life is associated with the affluence. Thus, the wards showing high factor scores on this dimension are those where development of amenities and infrastructure is high while the wards placed low factor scores on this dimension are with poor level of amenities and infrastructure so there is low quality of
housing. Nine wards come under high factor scores which are found in the North eastern periphery because these parts are residential areas of high socio-economic status groups and also area of low territorial stress the houses are spacious and these wards have open space i.e. playground and parks etc. The sampled households have all amenities like safe drinking water which is obtained by jet pumps, tube-well and by Municipal Water Supply, electricity, they have L.P.G. gas, stove for cooking purpose, telephones and automobiles etc. Their houses have open spaces i.e. lawns in the front and kitchen garden in back yards. While twenty one wards show medium level of amenities because these wards have moderate socio-economic status. People have moderate income therefore their houses have moderate infrastructure. Ten wards show a low level of environmental quality measured in terms of amenities and infrastructure because this area is characterised with low socio-economic as well as housing status. The houses are small and low quality because it is made up wood/mud/thatched. These wards are densely populated, generally speaking the more the population increase, greater is the strain on the infrastructural facilities available in the city. Inhabitants of these wards are mostly domestic servants and in various petty jobs. So their income is very low they are unable to live in good
houses and do not have access to even basic amenities like clean drinking water, sanitation facilities, electricity and health care etc. During the Survey it is found that some households depend on lantern and candles for lightening and they fetch the water from public hydrants and they cook their meals on kerosene stove or from dungcake. These wards do not have parks and playgrounds even their houses lacks open space. These conditions adversely effect the quality of life of the people living in these wards.

The responsibility of distributing water to different mohallas and maintaining the system however lies primarily with the local bodies, where the vested interest of the higher and medium socio-economic groups predominate. It is therefore, advisable to create special poor wings, the private bodies and entrust them with specific are responsibility of providing water facilities to these lower income households. The government should provide special assistance to these wings. The local bodies should be involved for day to day maintenance and minor repairs. Provision of water through tankers can only be the provision for the summer months.

Government should give subsidy for the purchase of LPG gas cylinder for its use. Improved cooking practices possibly in conjunction with improved stoves are of more relevance to the poor.
Health and Survival

Variables relating to level of nutrition and material facilities as well as vital demographic processes. This factor emerges as the health and survival dimension of quality of life. This dimension is largely governed by ten variable namely monthly income, number of medical practitioners, calorie intake, birth rate, infant mortality rate, death rate, black and white TV and number of nurseries. High factor scores on this factor refer to wards where nutritional level of population as well as life expentancy is high. The wards that show low factor scores are the areas where hunger and malnutrition are wide spread and scarcity and inaccessible health services result in high infant mortality rate and death rate. Medium level of health and survival conditions are found in the entire city because an almost homogenous character of the population with regard to dietary habits and vital processes. High factor scores wards are high residential areas. These wards are less densely populated, and it is good nutrition as well as access to health because the health status of the people is directly proportional to the dietary intake of protein, carbohydrate, vitamin, fats, mineral which in turn is related to socio-economic status. In these wards the good nutrition coupled with good living conditions are the reasons of their high
score and lastly the fertility and particularly mortality rates are low thus making the score high. The old city particularly the core is characterised with a low level of health condition because due to substandard environmental sanitation and hygiene condition as a consequence of congestion over crowding and low incomes, poor health and high mortality rate prevail. It is necessary to educate these people about food supply expressed mainly in terms of total energy (Calorie) intakes and also protein and other nutrients intakes particularly in more vulnerable groups such as infants, children and also to be and lactating mothers. During the survey and interrogation of the member of the households it is found that there are many factors responsible for under nutrition in the poorer households because of their economic constraints and inability to purchase more food for the family. Inadequacy of required food supply results imbalance in the proportions of energy calorie intake and protein intake and prevents proper utilisation of protein. This is a serious problem particularly in the young people who are mostly effected when there are more children in the family than they can be properly and adequately fed. Even in improved food supply situation, the most vulnerable may not receive necessary standards of required foods. Among the members of the same family
where mother is generally the worst sufferer although mothers diet should receive adequate attention for the health and proper growth of the baby to come and for required growth and nutrition of the infants being nursed. Improvement of purchasing power may not be accompanied with better nutritional character of the diets because of the tendency to spend more for non food purposes like T.V., Radio, Tape Records etc. ignorance, prejudices, wrong food selection and scarcity of medical services and medicine and some socio-cultural facts are responsible for low nutrition, high infant mortality rate, high death rate and high birth rate. Areas of moderate socio-economic condition show low level of health status because it is very much related to literacy rate of the inhabitant which the researcher found during the field survey that ever though the economic status and dietary intake was normal but morbidity rate was quiets high in those wards which has poor literacy rate. This probably is associated with poor hygiene practices in low literacy rate wards.

**Government should give priorities of food and nutrition policies in the national socio-economic development plans.** Government should provide basic health services include maternal and child care, education of the population in elementary health and nutrition.
Education and Recreation

The variables which loads high on this factor belong to the categories of education and recreations. These are schools, cinema hall and restaurants. Nurseries, medical practitioners load moderately on this dimension. The association of the educational institutions, places of leisure and recreation together with the medical units emphasises the tendency of these services to locate in the same places. Negative loadings of birth rate, infant mortality and low quality houses together with loadings of room density ratio (0.34848) and high quality (Ferro-Concrete/Houses (0.31429)). This signifies that these services are located in low density posh areas, while as a general rule these services tend to be located in high density areas.

The high factor score not with standing location or status of the wards definitely indicate greater availability of educational and recreational facilities or want of these facilities, if the wards score low on this factor. High concentration of high educational and recreational status are found in the North eastern while ward number 15 in the west and ward number 34 and 40 in the south because these are high status residential areas provided with equally high level of educational (of nurseries) and recreational facilities by the private as well as governmental organisations. Medium
scores on this factor are found in ward 1, 2, 4, 5, 13, 14, 16, 17, 18, 19, 20, 23, 27, 29, 30, 33, 36, 38, 39 because these wards are areas of either high or medium level of socio-economic status. Low factor scores wards are found in the old city they are ward number 21, 22, 24, 25, 26, 28, 31, 35, 36. All these areas are characterised with an equally low level of socio-economic status.

The schools have better facilities with regard to additional class rooms and recreational facilities at grass-root level the government should provide the modern systems of education and the students should be given technical job oriented education.

The present study was carried out at only two levels the city and the ward. Problems, which were faced due to the small number of units of analysis, included selection of a limited number of variables and separate analyses of residential pattern and quality of life which could more meaningfully be done by selecting a larger number of variables and combining the two sets of variables. This was not attempted in the present study because of limitations of computer programme and interpretive complexities. The limitations of unit of analysis and number of variables have also prevented the development of any general model of the residential pattern from the viewpoint of quality of life. As, at both levels the generalisation would have been an overs-implication of the reality.