Conclusions and Suggestions
CONCLUSIONS & SUGGESTIONS

From the foregoing discussion regarding the evolution of rural settlements and their spatial variation in Aligarh District, following conclusions may be drawn.

The Aligarh District is primarily agricultural in composition. Its rural society is tradition bound and the caste system still plays a dominant role in it, though winds of change have started blowing across it, which have begun to affect the rigidities of the hierarchy of castes.

The region has a very long history of settlement and has witnessed many phases of settlement growth and retreat, the last of which began with the Rajput colonization at the beginning of the twelfth century A.D., when the Tomars, belonging to a Rajput clan, established their kingdom in Delhi, and Dor Rajput, who was his vassal held sway over the town and fort of Koil.

The existing location, distribution and types of rural settlements are mainly controlled by physico-cultural factors.

The quantitative analysis of spacing of rural settlements at block level has revealed that there is a direct relationship between spacing and size of settlements in the study area.
The study of deviation from random situation, on the basis of first order nearest neighbour distance approximation analysis, of rural settlement in the Aligarh District has revealed that settlements are more regular than random. Hence the 'Regular Poisson Probability Law' is quite applicable in the case of settlements in the area under study.

An analysis of the shapes of the villages in the study area shows that the average shape index of the study area being 0.5994. Thirty three villages (18.97 per cent) conform roughly to rectangular or square shape. Two villages have very elongated shape, while three villages may be categorised under circular shape.

Contact index, population density and areal size did not show any significant correlation due to more or less homogeneous environmental conditions in the region.

Transformation of village shape into Dirichlet / Thies-son Polygons and Hexagons ought to be taken into consideration, while making plans for rural development. It has been found that village sites are mostly determined by physico-cultural factors whereas market centres have developed at the intersection of roads or along the roads. As the number of market centres increases the service area of individual market centres decreases. Increasing Christaller's K values may be taken as an index to represent better
efficiency of purchasing power and development on the one hand and transport connectivity of a region on the other, which should be taken into account while making plans.

The morphology of the rural dwellings in the study area shows that the building materials and architectural styles are the expression of the physical factors of the region, whereas the ground plans are closely related to the socio-economic conditions of the residents. Mud or clay, is widely used in the District, because plenty of cheap clay is available to construct walls and roofs. The size of a dwelling reflects the economic conditions of the dwellers. One or two room houses are inhabited by the poor people, while the middle class people live in three to four rooms dwelling and rich people live in houses having five or more rooms. The condition of rural houses in the study area is far from satisfactory. They are constructed in close proximity to each other, allowing little ventilation. Bad housing and lack of planning lead to unhealthy social habits, insanitary conditions, foul smell, etc., which increases the risk of diseases and infections.

A study of the socio-morphological structure of the three selected villages (built up areas) of the Aligarh District reveals that the economic power of the people rather than caste plays a decisive role in the selection of best available site for settlement.
The analysis of the spatial patterning of rural dwellings of different castes shows that segregation is closely associated with the castes of the inhabitants, resulting in the formation of distinct settlement units.

In the light of above conclusions some suggestions have been made for the improvement of housing conditions and village environment, and planning for rural development and for future studies in the present area of investigation.

1. In order to improve housing conditions, houses should be simple in design, making use of available material. Such a design has been suggested by the National Housing Board for the poor and middle income groups.

2. Congestion of houses may be reduced by providing extension sites for them. This can be achieved by filling up dirty ponds and pits lying near the inhabited sites.

3. All the villages and hamlets should be properly linked with one another with pucca or kaccha roads. Streets and lanes of settlements should at least be brick-lined.

4. Sewage system needs improvement by providing soakpits for individual houses and pucca drainage for streets, both of which should be cleaned periodically.

5. Cattle pens and sheds should be at some distance from dwelling sites with a view to improving facilities for health and sanitation.
6. There should be provision of dry latrines near the inhabited sites to avoid the unhygienic practice of defecating in the open fields.

Implementation of the above mentioned suggestion, involves a high cost. So the government and voluntary or social organizations should help the rural people by providing money and labour resources, to improve their living conditions and to make the village environment more hygienic.

7. Transformation of village shape into Dirichlet / Thiessen Polygons and Hexagons should be taken up as one of the measures for the planning of rural development.

8. The present study has highlighted only a few aspects of rural settlements geography. Planning will be facilitated if further research is oriented to find out the process of human adjustment to environment. There should be an indepth study of linkage between process of settlement and its structure in a settlement pattern to devise spatial organization for optimum mobilization of resources. Detailed data on migration are necessary, at village level to know the process that controls the structures. Similarly, detailed economic data are needed to analyse the growth or decline of rural economy to facilitate proper planning of rural settlements.