CONCLUSION
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After foregoing discussion regarding the evolution of rural settlements and their spatial variations in Meerut District, it may be concluded that the 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 Rajputs, who was his vassal held sway over the town.

The distribution of rural settlements is influenced by various factors. Out of the several physical, social, economic and political factors a few factors are more responsible for the distribution of rural settlements. However, the settlement distribution is not only determined by the natural conditions but also influenced by socio-economic factors.

The quantitative analysis of spacing of rural settlements at block level has revealed that there is a direct relationship between spacing and the size of settlements. It is obvious that where spacing is high villages are of larger sizes, with a small number of hamlets having higher densities of
population, which results in compact structure of settlements. On the contrary in areas of low spacing, settlements are generally smaller in size with low pressure of population and scattered distributional pattern, viz., hamleted type of settlements.

The study of deviation from random situation, on the basis of first order nearest neighbor distance approximation analysis of rural settlements 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 study area.

An analysis of the shapes of the villages show that the average shape index of the study area being 0.638. About 17 percent of the villages conform roughly to rectangular or square shape. 0.1 villages have elongated shape while nine villages approach nearly circular shape.

Contact index, population density and areal size did not show any significant co-relationship due to existing almost homogeneous environmental conditions in the region.

Transformation of village shape into Dirichlet / Thiesson 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 where as market centres have developed at the intersection of roads or along the roads. As the number of
market centres increases the services 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 the 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 on hand to construct walls and roofs. The size of a dwelling reflects the economic conditions of the dwellers. The poor people inhabit one or two room houses while the middle class people have three to four rooms dwellings 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.

The social morphological study of two selected villages (built up areas) 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 inhabited in the villages.

To improve the living conditions of the rural people and their settlements, it is important to comprehend the socio-economic of the people and the potential resources of the villages. The rural settlements are tradition bound and its nature of built-up area is spontaneous. They are closely knit together through invisible thread of social fabric, and interdependent to one another to carry out their socio-economic business. Breaking of joint family system, pattern of existing dwellings, fragmentation of land holdings, social conflicts are some of the causes for haphazard growth and mushrooming of settlements in countryside. In view of the above facts some of the important suggestions based on field experiences have been made to obtain the sustainable development of the countryside. These are as follows:

1. In order to improve housing conditions, house should be simple in design. Bricks that can be locally manufactured at the same time generating local employment can replace mud walls.

2. The congestion of houses may be relieved by providing extension sites for them. This can also be achieved by filling up the stagnant ponds and pits lying near the settlement sites. These pits and ponds served useful
purpose in medieval and ancient days but now they are turned into breading grounds of mosquitoes.

3. All the villages and hamlets should be connected with brick-lined road with a view to maintain cooperation among the different sections of the society and improvement of their socio-economic conditions.

4. The sewage system needs improvement by providing soak pits for individual houses and the pucca drainage for the streets, but both should be cleaned periodically.

5. Cattle pens and sheds should be kept little away from the dwelling sites attached to it with a view to good sanitation.

6. There should be provision of dry latrines near the inhabited sites to avoid the unhygienic practice of defecating in the open fields.

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. Extension of safe drinking water through more tubewell installations.

9. Electric connections should be extended to every bit of the region.

10. Provision of better education, health for all, and popularization of family planning measures, so that dependency burden on workers can be lessened.

11. In areas of water transport, better facilities as well as mechanization of boats should be done, in order to bring in a speedy communication system.
12. The illegal gathering of forest produce should be regulated by introducing social forestry, small-scale industries or handicrafts, generating rural employment and income.

13. Last but not the least, 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 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.

National and International development policies are giving higher priority to distribute the benefits of development to the poor and other disadvantaged, through a combination of accelerating overall growth and distributing more of the benefits directly to these groups. For the development of human settlements the available resources should be used efficiently and to its optimum level to provide jobs, goods, and services to the needy people of the rural areas; since poorest of the poor lives there. National and international development efforts seek to increase agricultural output and rural employment and incomes, the spatial focus of settlements.
policy must expand to include rural settlements as well as urban settlements. One way or another, the inhabitants of rural settlements should be provided with at least minimal facilities for safe drinking water, primary health care and education, marketing and storage facilities for agricultural produce and inputs, and opportunities to earn enough income, whether in cash or in kind, to provide adequate food, clothing and shelter. In addition, national settlements policies and plans should strive to provide the rural population with access to a wider variety of occupations and cultural facilities so that ambitious, educated rural people will be able to find challenges and rewards commensurate to their abilities.