

# URBAN ECOLOGICAL PROCESS

- **Urban ecology** is the scientific study of the relation of living organisms with each other and their surroundings in the context of an urban environment.
- The urban environment refers to environments dominated by high-density residential and commercial buildings, paved surfaces, and other urban-related factors that create a unique landscape dissimilar to most previously studied environments in the field of ecology.
- Urban ecology is a recent field of study compared to ecology as a whole. The methods and studies of urban ecology are similar to and comprise a subset of ecology.
- The study of urban ecology carries increasing importance because more than 50% of the world's population today lives in urban areas. At the same time, it is estimated that within the next forty years, two-thirds of the world's population will be living in expanding urban centers

It means whereby spatial distribution of people and activities change. They include:

# Urban Ecological Processes

- . **Centralization** :clustering of economic and service functions.
- . **Concentration** :tendency of people and activities to cluster together.
- . **Decentralization** :flight of people and activities from the centre of the city.
- . **Invasion** :entrance of new kind of people or activity into an area.
- . **Segregation**: concentration of a certain type of people or activities within a particular area.
- . **Succession** :completed replacement of one kind of people or activity by another.

- Concentration– occurs with the growth of towns and cities. It refers to population increase in a given area, as determined by population density
- Dominance– it is when one area in the city tends to have controlling social and economic positioning relation to the other areas
- Centralization– various institutions and establishments are drawn together along lines of transportation and communication.

- Decentralization– the scattering of functions from the main districts to the outlying districts. •
- Invasion– occurs when new types of people, institutions, or activities enter an area previously occupied by a different type.
- Succession– occurs when the new population or new function gains dominance.
- • Ecological segregation– arises from the fact that people differ according to ethnic grouping, religion, social class, or occupation

# Invasion and Succession

- Both these processes are adopted from ecology to describe the neighbourhood change and growth of the city whereby one social group succeeds in establishing itself by pushing out another in the valued urban space.
- These terms are associated with the Chicago School and particularly Burgess' Zonal Model. According to this model, the growing demand for land of the immigrant population for housing and other activities forces them to move to outward areas.

# INVASION

- Invasion refers to the inflow of rural population towards the city centre for various purposes-employments, education etc.
- It is more reflected among low economic status of immigrant groups.
- They move into adjacent residential areas, having a negative impact on the quality of life of the current occupant.
- Sometimes, the highest status groups find it more comfortable and convenient to move out of the city and shift to the periphery of the city.
- The word 'invasion' has a negative connotation which reflects negative sentiment of the resident population for the fresh migrants.

# Succession

- Succession means a process that shows successive movement of people in outward zones as the need arise. This movement is neither abrupt nor uniform, it moves in successive phases called succession. It is also viewed as an attack on the ecological or natural habitat of outer zones.
- Succession is a complementary process to invasion as it proceeds only after the invasion. These ecological processes of invasion and succession are frequently associated with an ethnic minority group's movement into an area and the following changes that are characteristics of many of the city's natural areas.

# Concentration and Centralization

- Concentration is a process of urban society which is very obvious. It occurs due to large rate of the immigration of rural population towards the city. "This rural-urban or even urban-urban migration leads to a higher concentration of population in the city with a variable demographic composition.
- A higher concentration of population further results in higher social interactions but is also characterized by superficial relationship or anonymity, pressure on available infrastructure etc.
- The fast growing population-density of cities is one significant indicator of the process of concentration. The tendency is towards localization of economic activity in and around a relatively small number of urban centres.

- Ethnic concentration exhibits another significant aspect of urban society. It is viewed both as a general process of residential differentiation among urban populations and as an aggregate effect of socio-economic and cultural differences.
- A number of studies have shown that ethnic groups vary considerably in the degree of their residential concentration. Residential proximity to persons of the same ethnic origin provides one important means of preserving familial cultural values and preferred modes of behaviour.
- For instance - Chittarajan Park, in New Delhi has a concentration of Bengali population. The Muslim population in Old Delhi and Punjabi migrants in Lajpat Nagar in New Delhi are few examples of ethnic concentration? of population.

# Segregation

- Segregation is also an important ecological process to understand social institutions and social groups in urban society. It refers to a process in which urban population becomes more and more divided into various social groups in terms of income status, social status (ethnicity, class) and other criteria. This division is due to spatial isolation and rearrangement of the residential pattern.
- Residential segregation is quite an observable phenomenon, which further widens the social distance among various localities. There is ample literature available on residential segregation in cities, the largest cities have commonly appeared among the most segregated areas.
- Therefore, the greater the degree of differences between the spatial distributions of groups within an urban area, the greater their social distance from each other