

F) Location and Spatial Distribution

Human geographers are concerned with describing and explaining the location and distribution of places and phenomena on the earth's surface. However, in order to properly understand the concepts of location and distribution as used in human geography, concepts as spatial, distribution, location, occurrence and magnitude should be understood.

Gordon J. Fielding has differentiated between these concept in following words.

Spatial:- The term spatial indicates an occurrence that occupies a portion of the earth's surface.

Distribution:- They are assemblages of occurrences related to each other. An occurrence is an identified phenomenon of a specific magnitude. A distribution is the arrangement of occurrence of some type.

Spatial location:- The position of places, things, objects or events occupying the earth's surface can be observed and cartographically fixed. Thus, the term spatial location can be defined as 'where' of a place, a thing, an object or event on the earth's surface.

Spatial Distribution - The term signifies distribution of places, things, objects or events of the same type that are spread out over the entire earth's surface or a part of it. There are 3 aspects of Spatial Distribution they are

(i) **Density** - Density of a spatial distribution is the overall frequency of occurrence of a phenomenon within a given area relative to the size of the area.

(ii) **Dispersion** - Dispersion of a spatial distribution is the extent of the spread of a phenomenon relative to the size of a given area.

(iii) **Pattern of Spatial Distribution** - It refers to the geometric arrangement of a phenomenon without regard to the size of area.

Types of Spatial Distribution -

↓
Random

↓
Non-Random

↓
Uniform (systematic)

↓
clustered

Random Spatial Distribution Pattern:-

A random spatial distribution pattern has no discernible order and where things or phenomena lay by chances. Example is pattern of spacing of trees in a forest which is neither clustered nor uniform. Random distribution pattern reflects effects of more than one process.

Non-Random Spatial Distribution Pattern:-

Non-Random distributions exhibit arrangements that are unlikely to have occurred by chance. Non-random distribution pattern could be either uniform (systematic) or clustered or a combination of two. The process or processes that give rise to such a pattern may be either distributed uniformly throughout a defined area or spatially concentrated in a part or few parts of that area.

Uniform Pattern:- In uniform patterns, occurrences are more regularly distributed than random pattern. For example one can find the emergence of a uniform pattern of villages in a geographically homogeneous region such as alluvial plains.

Clustered Distribution:-

In clustered distribution, occurrences are spatially more concentrated than would be expected in random distribution patterns. Generally, a clustered pattern results in geographical occurrences benefit from close proximity.

3) Hierarchy/Hierarchies:-

~~Hierarchy~~ Hierarchy is the ranking or ordering of things on the basis of size, function or any other basis of importance. In spatial terms the world may be conceived as hierarchically organised entity in order of its size, functional importance or any other basis of geographical importance. The spatial hierarchy may be thought of as the rank or order of various places and things on the earth's surface. Example is hierarchy of settlements in India from largest unit (Metropolitan cities) to tiniest unit (hamlet) based on population.

The size of settlements often determines the level of interaction among them. Other things remaining equal, there would be a higher degree of interaction among settlements of higher population size compared with settlements of lower population size.

The concept of spatial hierarchy is often used in administration and development planning of a country. Eg. State & Districts.