

Environmental Degradation

Environmental degradation refers to the deterioration in the physical component of the environment, mainly due to biological processes, but more specially due to human activity, to such a great extent that it cannot be easily restored by the self-regulatory mechanism or homeostatic mechanism of the environment.

Environmental degradation may be due to extreme events and hazards or due to pollution.

Extreme events and hazards are unexpected threats of large impact. They may be classified on the basis of causative factors.

Natural hazards are caused by natural factors. These may be terrestrial natural hazards which occur on the earth's land surface, e.g., the continents, and are caused by endogenetic forces, e.g., volcanic eruptions, earthquakes etc.; atmospheric natural hazards which occur by atmospheric processes affecting the living and non-living (abiotic) components of the natural environmental system, e.g., cyclones, forest fires etc.; and cumulative atmospheric hazards, caused by atmospheric processes which accumulate for several years in continuation, e.g., flood, drought etc.

Man-induced hazards are the result of cumulative and even sudden effects of man's activities. These could be physical man-induced hazards, caused by large-scale landslides, deliberate forest fires, etc., chemical and nuclear hazards, caused by the release of toxic elements

in the atmosphere by human activities, accidental outbursts of poisonous gases from chemical factories, nuclear explosions, and biological hazards induced by man, for example, sudden increase or decrease in the population of a species in a region due to increased nutrients or increase in toxic elements.

Biological hazards (not caused by man) include dangers posed by epidemics, natural extinction of any particular species, locust swarms, etc.

[The topic of pollution is discussed later.]