Ecological Fragility or Ecosystem Fragility

The identification of species, communities, or ecosystems that are likely to be strongly damaged by human activities (i.e. that are fragile) forms an essential part of nature conservation management.



FRAGILE ECOSYSTEM

A fragile ecosystem is an ecosystem or community which lacks resilience or which is so heavily impacted by an 'un-natural' (human?) event that it changes in unexpected and undesirable ways leading into the conditions that are often termed as natural catastrophe.

The fragile ecosystem, as can be claimed is the price paid by the humans for incessant development done at the cost of natural destruction

✓ The meaning of ecosystem fragility, which is defined as the inverse of ecosystem stability, is reviewed.

- ✓ Fragility may be regarded as an inherent property of an ecosystem, i.e. an ecosystem has a certain fragility whether or not it is ever exposed to any disturbances.
- ✓ This fragility is impossible to quantify, leaving it as a mere metaphysical term. The only observable fragility is that displayed as a result of disturbances, natural as well as human-caused, operating in the ecosystem.
- ✓ The diversity of ecological processes related to these changes makes ecosystem fragility a central evaluation criterion in conservation management. Fragility is also closely related to many frequently used criteria in evaluation and assessment for conservation. Application of the concept of ecosystem fragility in nature conservation, how to systematize its assessment, and how to locate especially fragile areas, are discussed.

Causes affecting fragile ecosystem

- Growing population
- Intensive industrialization
- Unplanned urbanization
- Intensive agriculture
- Extensive exploitation of resources
- Unscientific resource use

Impact of undue interference are

- ➤ Lowering water table
- > Pollution
- Decline in the availability of resources
- ➤ High price rise
- > Frequent occurrence of disaster
- Poverty