

## Principles of Ecology.

- ① As distance b/w the organism of a given trophic level and initial source of energy (TL1) ↑ the probability of the organism to depend exclusively on preceding TL ↓ for energy ↓. TL3 & beyond organism become 'generalist'
- ② Species at progressively higher TL appear to be progressively more efficient in using their available food supply.
- ③ The relative loss of energy due to respiration is progressively greater to ↑ higher TL -
- ④ Biogeochemical cycle - Organic & inorganic substances are cycled among the various components of the biosphere.
- ⑤ Ecosystem productivity - growth of energy/organic matter per unit time by autotrophs at TL1.
  - ① Solar energy (availability) <sup>2</sup>
  - ② efficiency of G.P. to convert SE into chemical energy
- ⑥ Homeostasis of the ecosystem.
- ⑦ Stability of Ecosystem - ↑ with ↑ is no. of links in food web because a large no. of interacting feeding links provide alternative channels for energy flow and thus generate a wide variety of adjustment of the population to env. changes and stresses within the ecosystem.

depends upon