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Sub. Biology

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Based on NCERT patterns

1. What will happen if we kill all the organisms in one trophic level?

If we kill all the organisms in one trophic level, the food supply to the next level will strop resulting in imbalance of the ecosystem.

As a result animals in the higher levels will die making the growth of animals in lower trophic level increase in an enormous way. All of this will affect the overall balance in the ecosystem.

2. Will the impact of removing all the organisms in trophic level be different for different trophic levels?

Can the organisms of any trophic level be removed without causing any damage to the ecosystem?

Yes, the impact of removing all the organisms in a tropic level will be different for different trophic levels. For example, if all the producers are removed, there is a chance of death or migration of the primary consumers which will upset the trophic levels. This is same for all the levels.

Therefore, removal of organisms at any level would upset the whole ecosystem as the food chain is disturbed. The survival of the higher level animals is completely dependent on the animals at the lower levels.

3. What is biological magnification? Will the levels of this magnification be different at different levels of the ecosystem?

Biological magnification can be defined as the progressive increase in the concentration of nonbiodegradable wastes in the food chain.

As there is an increase in the magnification at the primary level of the ecosystems, all the other levels do get affected and the concentration may vary when compared to first level.

4. What are the problems caused by the non-biodegradable wastes that we generate?

Following are the problems caused by the non-biodegradable wastes:

• These substances cannot be decomposed by the microorganisms.

- As the quantity increases, dumping becomes a problem.
- Non-biodegradable wastes like heavy metals may enter the food chain in the upper trophic levels.
- They may escape to the ground water which causes soil infertility and disturbance in pH of the soil.