

side altering at the ecosystem equilibrium
eg: SARS virus (Ecosystem Dynamics in
human population) which causes In 1993 disease
outbreak in a human population which cause
severe respiratory disease and human
was rapidly died . After studies in
laboratory it can caused by ecosystem dynamics
and name the disease as Hantavirus.

Ecosystem Homeostasis:

Homeostasis of the ecosystem is also
acknowledge as a biological equilibrium or
means a balanced 'the nature'. Homeostasis is
the state when an ecosystem maintains
a biological equilibrium between the different
components . It continues to change with the
time and is not stationary yet it maintain
a stability which is sustained by no. of
factors including the carrying capacity of
the environment and the capacity for
recycling of the waste.

and their organisms and their environment, they can be of any size but usually encompass specific, limited spaces.

1. Internal and External factors: Ecosystem are dynamic entities controlled both by internal and external system are dynamics entities controlled both by external and internal factor

External factors, such as climate and the particular materials that forms the soil, control the overall structure of an ecosystem and the way things work within it, but are not themselves influenced by the ecosystem. While the resources within ecosystem inputs are generally controlled by external processes, the availability of these resources within the ecosystem is controlled by internal factors such as decomposition, root competition or shading. Other internal factors include disturbance, succession and the types of species present. Ecosystem from one year to another ecosystem experience variation in their biotic and abiotic environment. A drought, an esplo-

(R) Environment they decompose
systems are
internal
entities
external factors
and the place
and the
we not

building up during resource rich periods.
Equilibrium is the steady state of an
ecosystem where all organisms are in balance with
their environment and with each other. In equilibrium
any small change to the system will be balanced
by negative feedback, allowing the system to return
to its original state.

(P) Resistance and Resilience: In ecology, two parameters
are used to measure changes in ecosystem i.e.,
Resistance and resilience. Resistance is the ability
of an ecosystem to remain at equilibrium
after despite disturbances. Resilience is the speed
at which an ecosystem recovers to equilibrium
after being disturbed. Human may impact entire
ecosystems
on one
or disturbance
is present.
In ecosystem
these cases, external human influences can
lead to the complete destruction or inva-
sion esp.

many cold winter, and pest outbreak all constituting
short term variability in environmental conditions.
Animal population vary from year to year,

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(contd.)

the effect of density on the reproduction
in potential deals with regulation feedback system.
plays an important role in the ecosystem in which one component
one component of ecosystem in which one component
of ecosystem maintains check on the population of
other component. There are positive or negative
feedback system. Positive feedback is the increase
in the population of organism at a lower level
for eg. when there is an increase in the population
of herbivore animals. Now, it increase the
population of frogs and birds. In the same way,
also the increased population of omnivorous animals
predates on the herbivores which is termed
as the negative feedback.

- b) Producer to consumer
- c) Consumer to decomposer

2. Cyclic use of materials:

The chemical element comprise the abiotic component are circulate in ecosystem starting from nutrient soil to producers, producer to consumer, consumer to decomposer and then back to nutrient soil.

3. Eco regulation:

Biotic component and abiotic components are regulated by each other. Thus ecosystem is maintained.

Ecosystem dynamics:

An ecosystem is a community of living organisms (plants, animals and microbe) existing conjunction with the non-living components of their environment (air, water and minerals soil), interacting as a system. These biotic and abiotic components are linked together through nutrient cycles and energy flows. As ecosystem are defined by network of interactions among organism, or between organisms and