

5.3- Conserving Biodiversity

Renewable resources- can be replaced by natural processes faster than they are used

Ex: solar energy, agricultural plants, animals, clean water, and clean air.

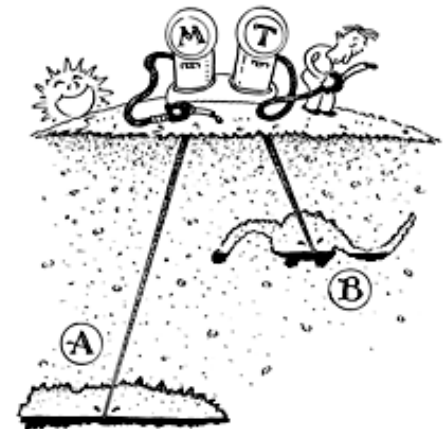


Nonrenewable resources- only limited amounts are available

or

are only replaced over extremely long periods of time

Ex: fossil fuel and mineral deposits like coal or gold



**NATURAL
RESOURCES**

**RENEWABLE
RESOURCES**

**NON-RENEWABLE
RESOURCES**



Plants



Animals



Minerals

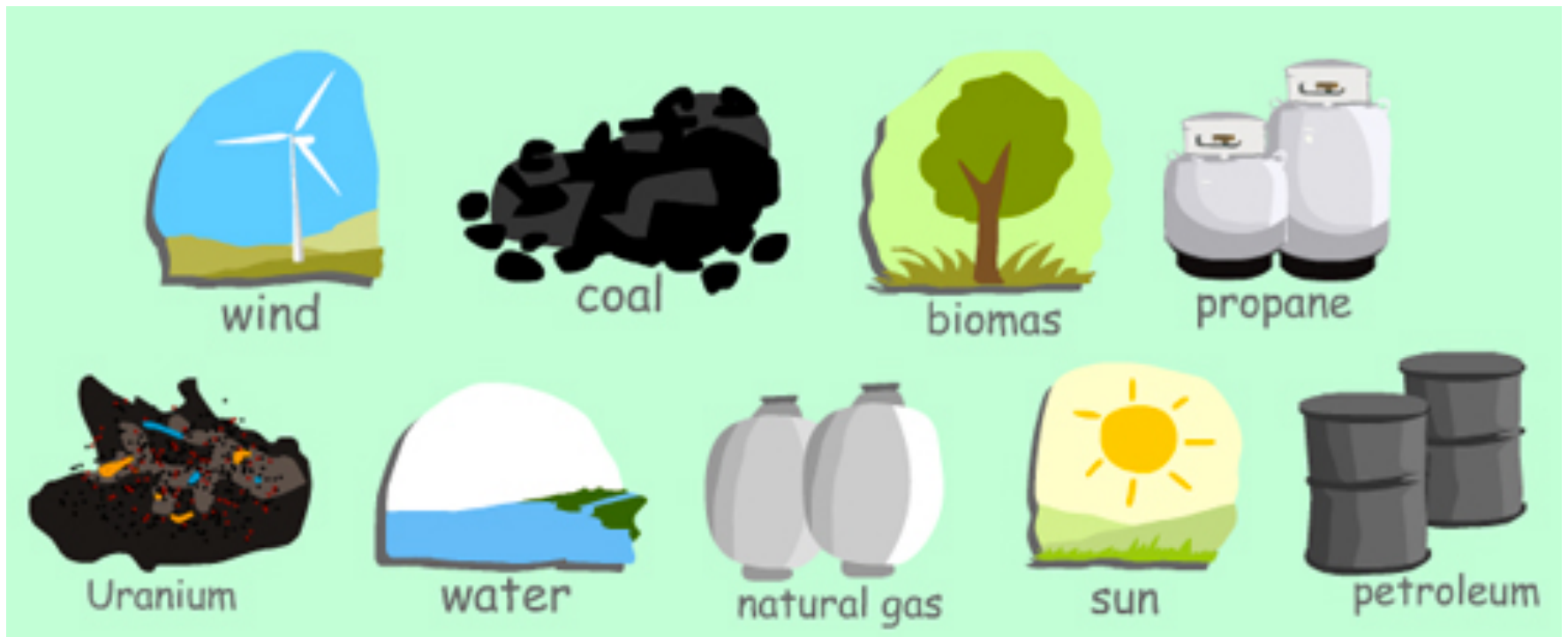


Fossil Fuels



Soils

The classification of a resource as renewable or nonrenewable depends on the context.



Sustainable use means using resources at a rate which they can be replaced by nature



Protecting Biodiversity

National Parks



About 7% of the world's land is protected in parks and nature preserves

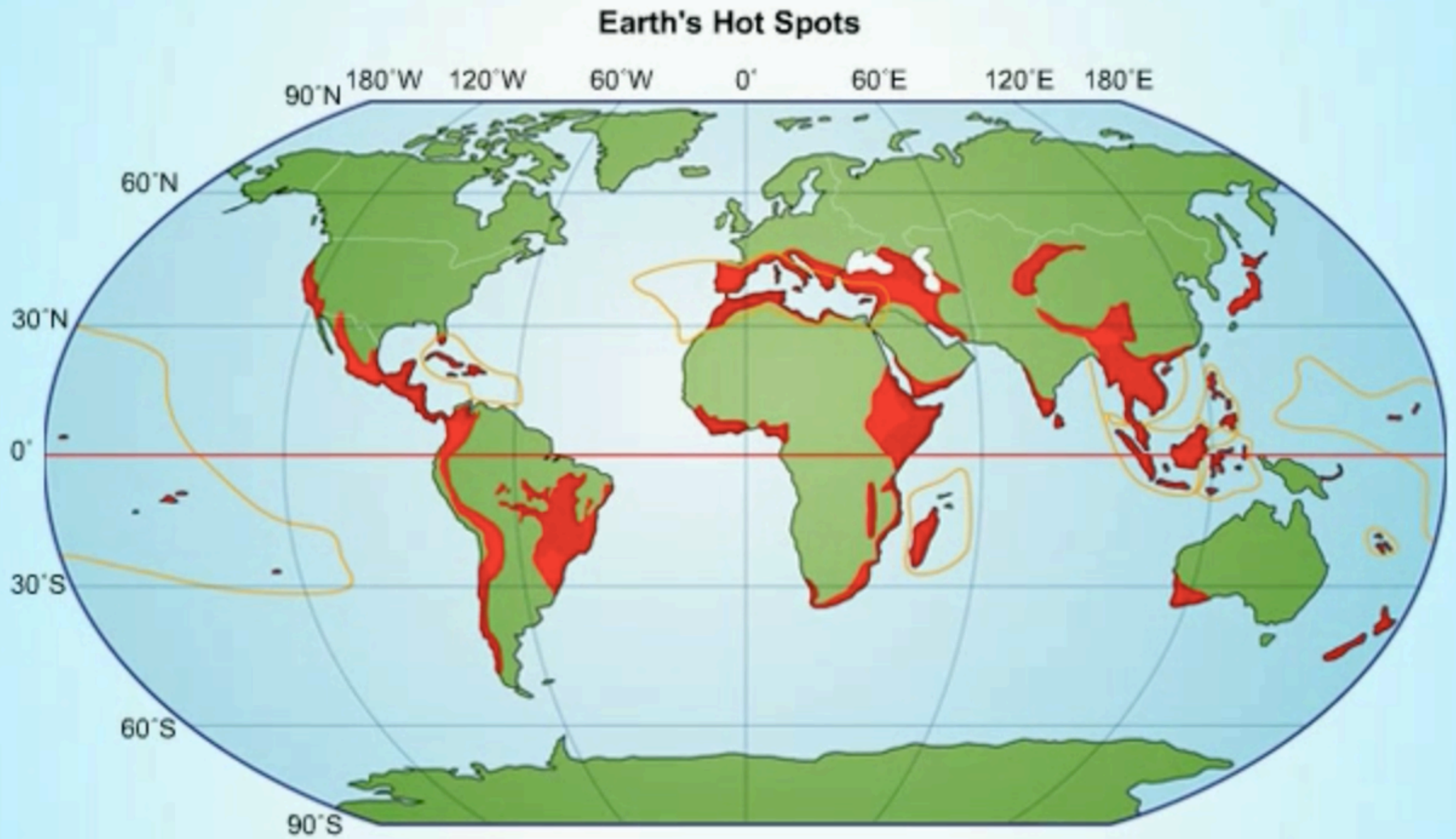
Endemic species- only found in one specific geographic location.



Biodiversity hot spots- locations with large number of species at risk of extinction

- have at least 1500 endemic plants and lost 70% of the original habitat.
- almost half of all plant and animal species on Earth are in the hot spots.

Biodiversity Hot Spots



Wildlife Corridors-

connect pieces of land

allow organisms to move safely



EASTERN GHATS

Biligiri Rangaswamy Temple (BRT)
Tiger Reserve



(BRT)
Tiger Reserve



Sathyamangalam
Tiger Reserve

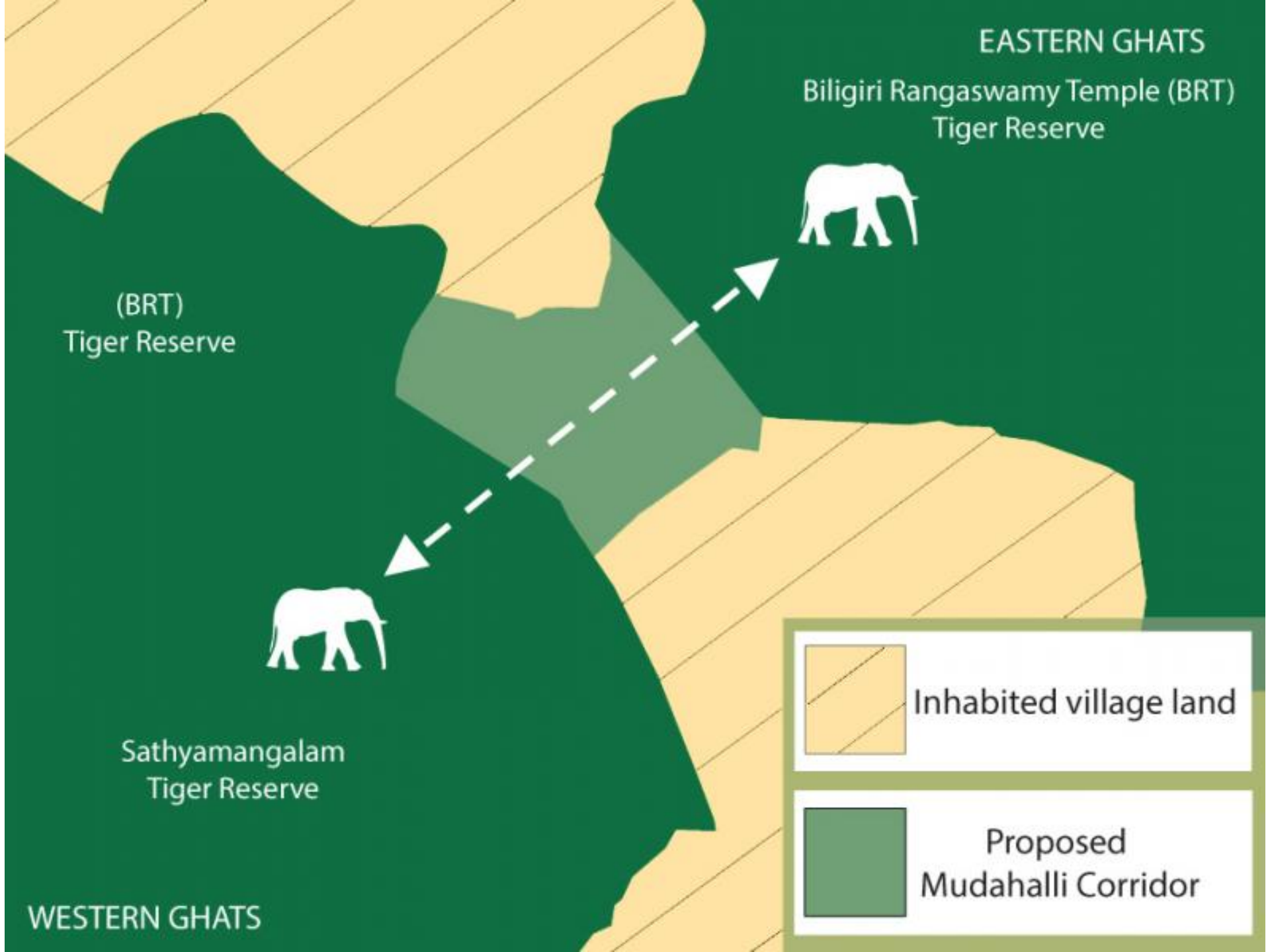
WESTERN GHATS



Inhabited village land



Proposed
Mudahalli Corridor



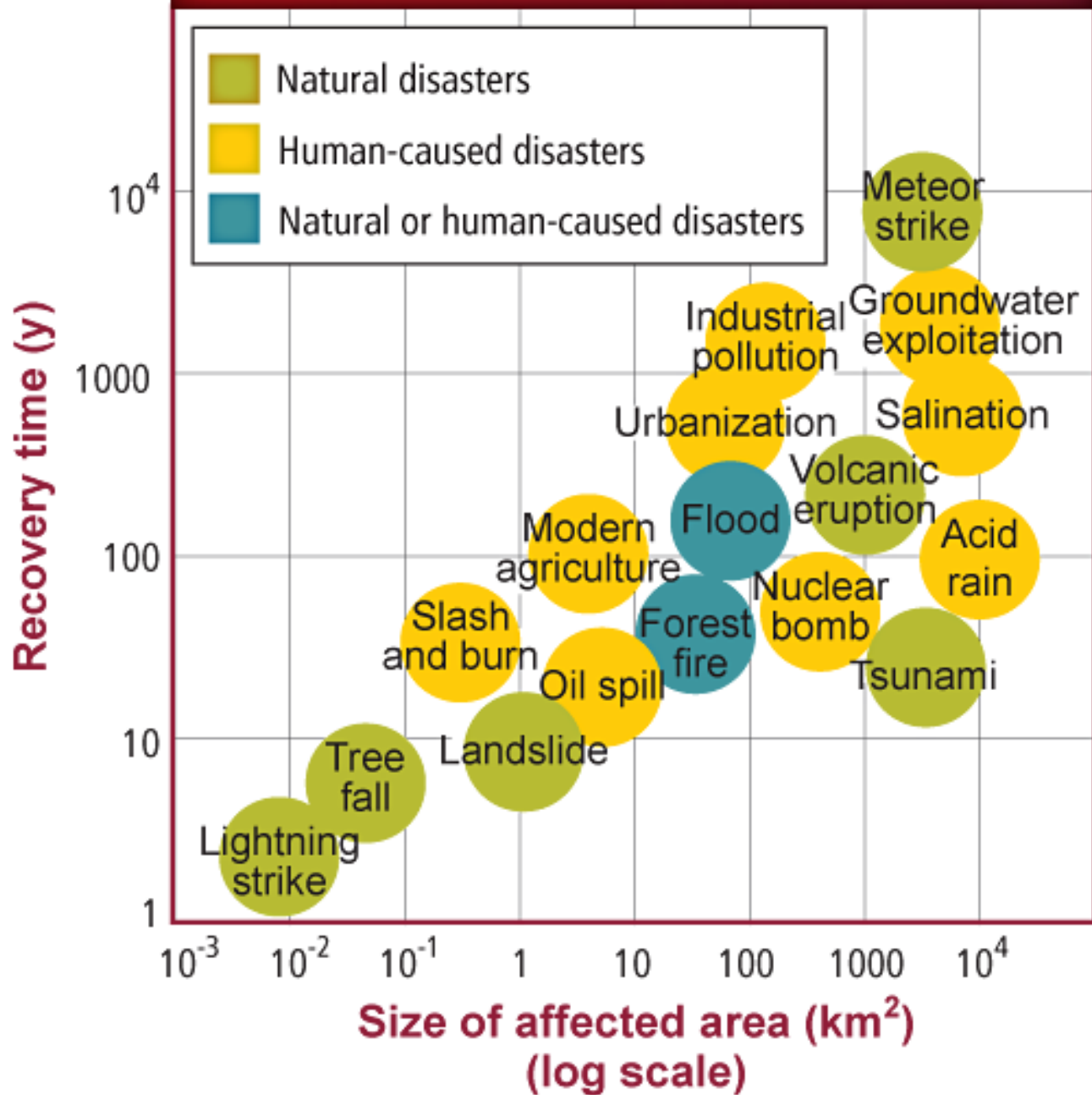


Restoring Ecosystems-

communities can recover from disasters, given enough time.

The larger the area, the longer it takes to recover.

Recovery Time for Disasters



Ecologists use two methods to speed recovery time:

- bioremediation

- biological augmentation.

Bioremediation- use of living organisms to detoxify a polluted area

ex: prokaryotes, fungi, or plants

Biological Augmentation-

Adding essential items to an ecosystem

Ex: ladybugs to control insect populations

Legally Protecting Biodiversity

USA-

Endangered **S**pecies **A**ct (ESA)
1973, designed to protect species
in danger of becoming extinct.

Legally Protecting Biodiversity

International

Convention on **I**nternational
Trade in **E**ndangered **S**pecies
(CITES) 1975- outlaws the trade
of endangered species and
animal parts all over the world.