

NATURAL RESOURCES



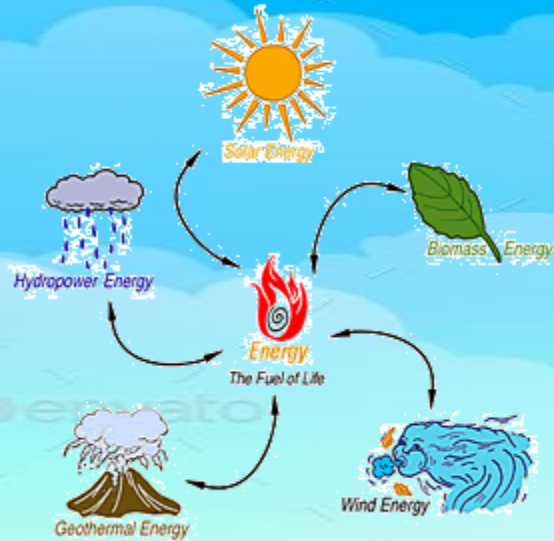
WHAT IS NATURAL RESOURCES?

1. A NATURAL RESOURCES IS A SOURCE OF PRODUCT THAT ARE INHERIT TO EARTH.
2. NATURAL RESOURCES INCLUDE RENEWABLE AND NON-RENEWABLE RESOURCES.
3. NATURAL RESOURCES ARE EXPLOITED TO CREATE THE PRODUCTS AND SERVICES THAT WE DEPEND ON.
4. NATURAL RESOURCE EXTRACTION CAUSES GREAT ENVIRONMENTAL DISTURPTION.

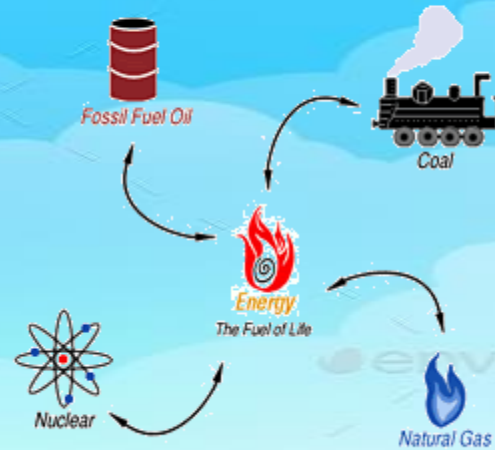


THERE ARE 2 TYPES OF NATURAL RESOURCES

Renewable Energy



Non-Renewable Energy



**RENEWABLE
RESOURCES**

**NON-RENEWABLE
RESOURCES**

RENEWABLE RESOURCES



WIND ENERGY



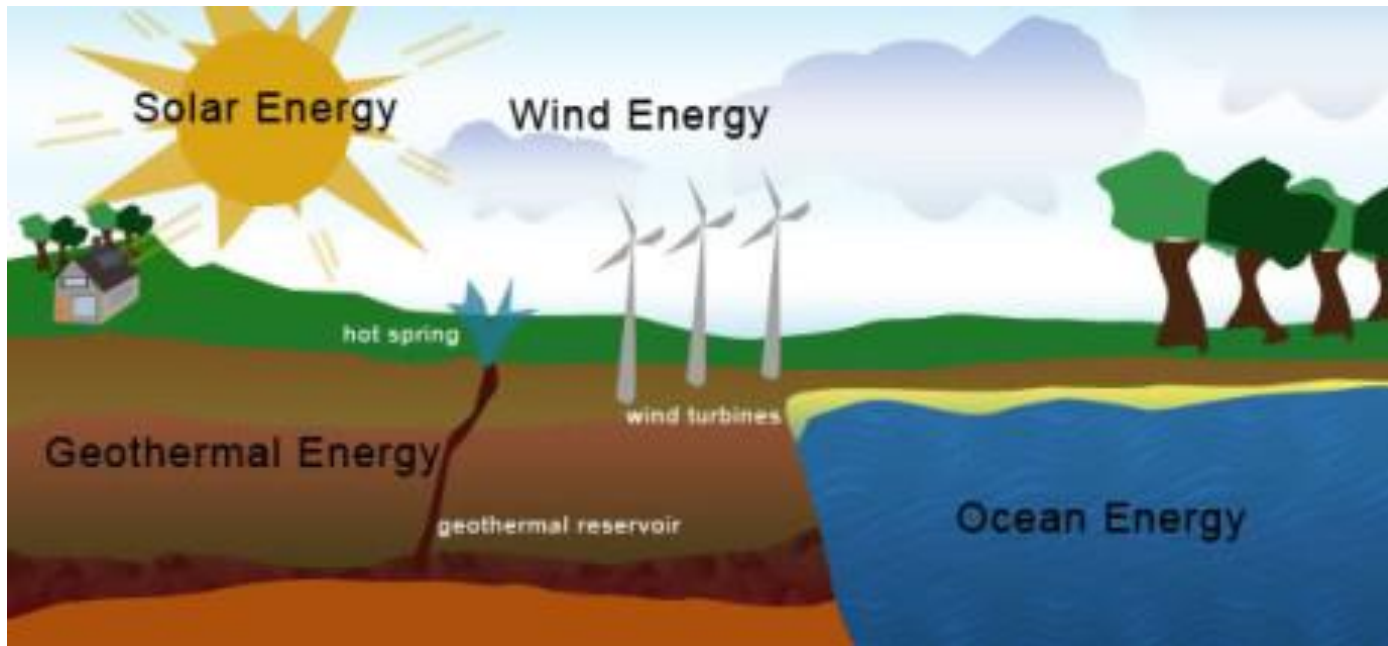
**SOLAR
ENERGY**



FOREST

RENEWABLE NATURAL RESOURCES

RENEWABLE RESOURCES ARE THOSE THAT CAN BE REPLENISHED DURING OUR LIFETIME, SUCH AS SUNLIGHT, WIND, WATER, PLANTS, AND ANIMALS. THE RATE AT WHICH RENEWABLE RESOURCES ARE REPLENISHED MAY DIFFER. FOR EXAMPLE, WE WILL NEVER RUN OUT OF SUN AND WIND IN OUR LIFETIME BECAUSE THE EARTH CONSTANTLY SUPPLIES THESE RESOURCES.



WIND

WIND IS CAUSED BY THE UNEVEN HEATING OF THE ATMOSPHERE. SOME AREAS OF THE WORLD, SUCH AS COASTAL REGIONS, HAVE MORE WIND THAN OTHERS BECAUSE THE TERRAIN OF THE AREA IS RELATIVELY FLAT AND HAS FEW OBSTACLES TO BLOCK THE WIND FROM BLOWING

THE POWER OF THE WIND DRIVES SAILBOATS. IT HAS BEEN USED TO POWER WINDMILLS THAT GRIND GRAIN. WINDMILLS CAN ALSO USE THE CIRCULAR MOVEMENT OF THE BLADES TO TURN TURBINE. THIS IS INCREASINGLY USED AS A MEANS OF GENERATING ELECTRICITY.

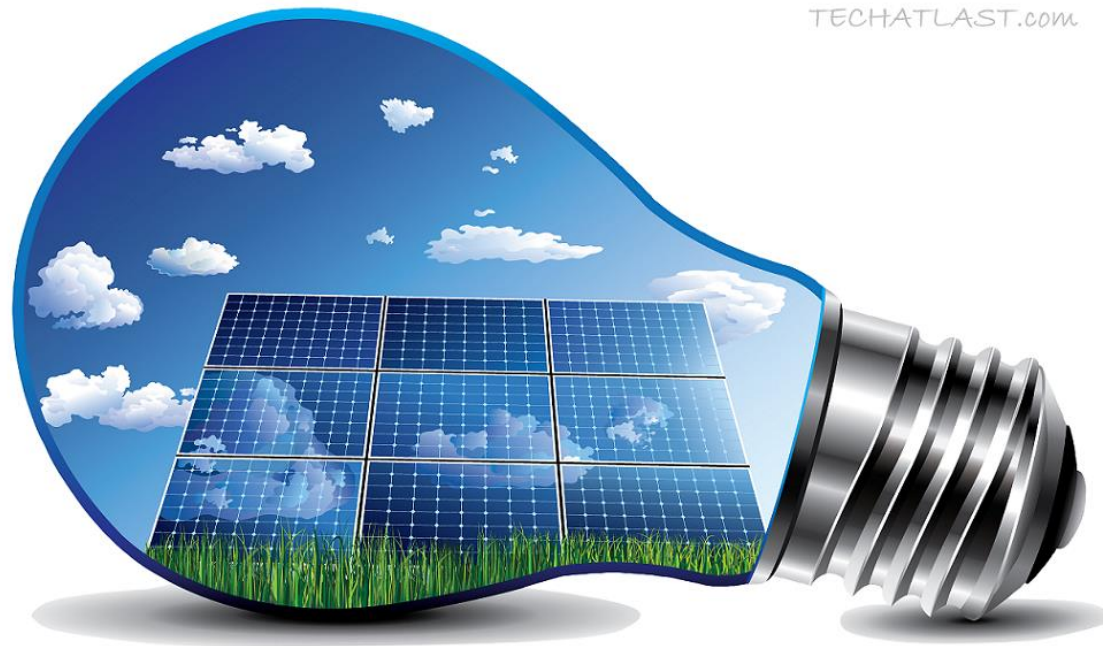


SOLAR ENERGY

THE SUN IS THE CLOSEST STAR TO EARTH. IT BRINGS HEAT AND LIGHT TO THE WORLD. SOME AREAS OF THE WORLD SUCH AS, THOSE CLOSEST TO EQUATOR, HAVE MORE SUN THAN OTHERS.

THE SUN SHINES NATURALLY BUT IT IS NOT AFFECTED BY HUMAN ACTIVITY. IT CANNOT BE USED UP. HOWEVER, ITS INTENSITY VARIES WITH THE SEASONS, AND IT IS NOT AVAILABLE AT NIGHT.

TECHATLAST.com



FOREST

FORESTS HAVE MODERATE CLIMATE, HELP CLEANSE THE AIR AND WATER, AND HOUSE WILDLIFE. THEY ALSO PROVIDE THOUSANDS OF WOOD PRODUCTS AND RELATED JOBS.

TREES ARE USED TO MAKE PAPER, HOCKEY STICKS, FLOORING, AND FOOD.

FORESTS FACE THREATS FROM FIRE, POLLUTION, EROSION AND RAIN.



NON-RENEWABLE RESOURCES

THE FOSSIL FUELS

oil



natural gas



coal



© Study.com

NON-RENEWABLE NATURAL RESOURCES

NON-RENEWABLE RESOURCES ARE SOURCES FOR WHICH THERE IS LIMITED SUPPLY.

EXAMPLES: FOSSIL FUELS AND NUCLEAR FUELS

NON-RENEWABLE RESOURCES



FOSSIL FUELS

FOSSIL FUELS ARE ARGUABLY ONE OF THE MOST VALUABLE NATURAL RESOURCES IN MODERN TIMES. IT IS ESTIMATED THAT 86% OF THE WORLDS ENERGY COMES FROM BURNING FOSSILS FUELS. FOSSIL FUELS ARE THE SOURCE OF ENERGY FOR ALMOST EVERY MACHINE, INCLUDING THE GENERATIONS THAT PRODUCE ELECTRIC ENERGY.





BIOTIC
RESOURCE

S



ABIOTIC
RESOURC
ES

BIOTIC AND ABIOTIC NATURAL RESOURCES

THERE ARE SEVERAL WAYS TO CLASSIFY NATURAL RESOURCES, INCLUDING WHERE THEY COME FROM AND IF THEY ARE RENEWABLE OR NOT. IF NATURAL RESOURCES CAME FROM LIVING THINGS OR ORGANIC MATERIALS, THEN THEY ARE CONSIDERED AS BIOTIC RESOURCES. BIOTIC RESOURCES INCLUDE PLANTS, ANIMALS, AND FOSSIL FUELS. THE THREE FOSSIL FUELS ARE COAL, OIL AND NATURAL GAS.

ON OTHER HAND, ABIOTIC RESOURCES ORIGINATE FROM NON LIVING AND INORGANIC MATERIALS. FOR EXAMPLE, AIR, SUNLIGHT, AND WATER ARE ABIOTIC NATURAL RESOURCES. MINERALS ARE ALSO CONSIDERED AS ABIOTIC





Uses of Natural Resources

Natural Resources	Uses
Air (Wind)	Required for all living things for breathing, Use to produce wind energy.
Animals / Plants	Provide food, cloth, shelter, medicine. Used as mode of transport. Animal dung can be used as fuel/fertilizer.
Soil	Used as the primary nutrient source for plants. It is the habitat of many organisms.
Solar Light	Provide light, energy and help to plants for making their foods
Wood / Tree	Used as construction material. Used to make utensils, furniture and sporting equipments.
Water	Used in household, agriculture and transportation.

MAJOR PROBLEMS WITH NATURAL RESOURCE CONSERVATION

LOW AWARENESS FOR CONSERVATION OF NATURAL RESOURCES

EXPLOITATION OF LIVING NATURAL RESOURCES FOR ECONOMIC GAIN

VALUE AND KNOWLEDGE ABOUT THE SPECIES AND ECOSYSTEM INADEQUATELY KNOWN

UNPLANNED URBANIZATION AND UNCONTROLLED INDUSTRIALIZATION



Conservation of Natural Resources:
Soil, Wildlife and Energy



MAJOR NATURAL RESOURCES THREATS

HABITAT DESTRUCTION

EXTENSION OF AGRICULTURE

FILLING UP OF WETLANDS

CONVERSION OF RICH BIODIVERSITY SITE FOR HUMAN SETTLEMENT AND INDUSTRIAL DEVELOPMENT

UNCONTROLLED COMMERCIAL EXPLOITATION



THREATS TO NATURAL RESOURCES

1. Overpopulation Which Brings About Over-exploitation

As the human population keeps on enlarging, there is a lot of pressure on the utilization of almost all natural resources. This often causes over-exploitation of the natural resources. To worsen matters, exhaustible natural resources such as arable land, coral reefs, fresh water, fossil fuels, and wilderness forests drop sharply due to over-exploitation to sustain the ever increasing population. This creates competitive demands on the vital life-sustaining resources and contributes to an incredible decline in the quality of life.

2. Intensive Agricultural and Farming Practices

Intensive agricultural practices have claimed much space of the natural resources because farmers resort to converting forests and grasslands to croplands. In the modern world, the pressure to convert lands into resource areas for producing priced foods, crops, and livestock rearing has increasingly led to the depreciation of natural resources especially forests, wild life and fertile lands. Runoff of agricultural waste, fertilizers, and pesticides into marine and freshwater environments has also negatively threatened various natural crop species, natural water resources and aquatic life.

3. Climate Change and Global Warming

The severe changes in climate patterns as a result of human activities and overpopulation that generate greenhouse gases and carbon footprint in the atmosphere threatens biodiversity as well as other numerous natural resources. Species that have acclimatized to specific environments are highly affected as the climate change and global warming alters the favorable survival conditions. The profound effect of climate change and global warming is habitat loss to an extent of threatening biodiversity and the survival of species. For instance, wildlife that requires cool temperatures of high elevations such as the rock rabbit and mountain gorillas may in the near future run out of habitat due to global warming.

An aerial photograph of a vineyard on a hillside. The rows of grapevines are arranged in a grid pattern, following the contours of the land. The vines are a vibrant green color. The ground between the rows is a mix of brown soil and some sparse vegetation. In the background, there are more trees and a denser forest. The text "LAND RESOURCES" is overlaid in the center of the image in a bold, black, sans-serif font.

LAND RESOURCES

INDEX



LAND
DEGRADATION



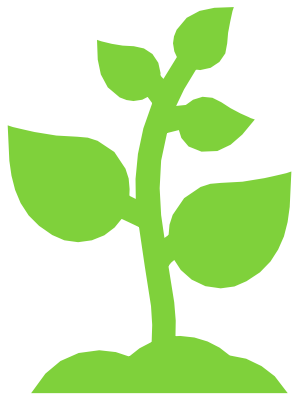
MAN INDUCED
LANDSLIDES



SOIL EROSION



DESERTIFICATION



LAND DEGRADATION

WHAT IS LAND DEGRADATION ?



Land degradation is a process in which the value of the biophysical environment is affected by a combination of human-induced processes acting upon the land. It is viewed as any change or disturbance to the land perceived to be deleterious or undesirable. Natural hazards are excluded as a cause; however human activities can indirectly affect phenomena such as floods and bush fires.

CAUSES OF LAND DEGRADATION

- ▶ Land clearance, such as clearcutting and deforestation
- ▶ Agricultural depletion of soil nutrients through poor farming practices
- ▶ Livestock including overgrazing and overdrafting
- ▶ Inappropriate irrigation and overdrafting
- ▶ Urban sprawl and commercial development
- ▶ Vehicle off-roading
- ▶ Quarrying of stone, sand, ore and minerals
- ▶ Exposure of naked soil after harvesting by heavy equipment
- ▶ Dumping of non-biodegradable trash, such as plastics





MAN INDUCED LANDSLIDES

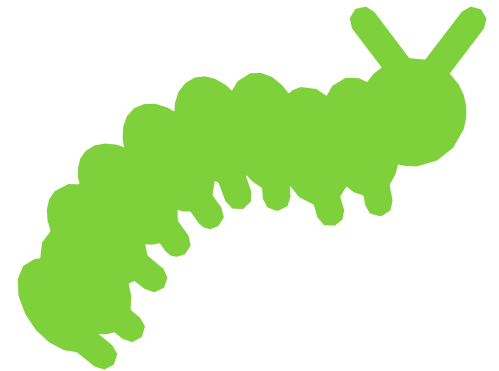
Human-induced landslides (HIL) refer to landslide events that are directly triggered or partially aggravated by anthropogenic activities. Most of them are the results of anthropogenic factors such as modification of the topography, change of the water circulations, land use changes, ageing of infrastructure, etc.



SOIL EROSION



Soil erosion is the displacement of the upper layer of soil, it is one form of soil degradation. This natural process is caused by the dynamic activity of erosive agents, that is, water, ice (glaciers), snow, air (wind), plants, animals, and humans.



PREVENTION OF SOIL EROSION



THE MOST EFFECTIVE KNOWN METHOD FOR EROSION PREVENTION IS TO INCREASE VEGETATIVE COVER ON THE LAND, WHICH HELPS PREVENT BOTH WIND AND WATER EROSION

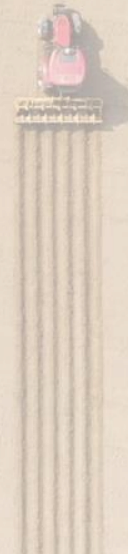


TERRACING IS AN EXTREMELY EFFECTIVE MEANS OF EROSION CONTROL, WHICH HAS BEEN PRACTICED FOR THOUSANDS OF YEARS BY PEOPLE ALL OVER THE WORLD.



WINDBREAKS (ALSO CALLED SHELTERBELTS) ARE ROWS OF TREES AND SHRUBS THAT ARE PLANTED ALONG THE EDGES OF AGRICULTURAL FIELDS, TO SHIELD THE FIELDS AGAINST WINDS.

DESERTIFICATION



DESERTIFICATION

Desertification is a type of land degradation in which a relatively dry area of land becomes a desert, typically losing its bodies of water as well as vegetation and wildlife. It is caused by a variety of factors, such as through climate change (particularly the current global warming) and through the overexploitation of soil through human activity.



#IRONY 

CAUSES OF DESERTIFICATION



Overgrazing: Animal grazing is a huge problem for many areas that are starting to become desert biomes. If there are too many animals that are overgrazing in certain spots, it makes it difficult for the plants to grow back, which hurts the biome and makes it lose its former green glory.



Deforestation: When people are looking to move into an area, or they need trees in order to make houses and do other tasks, then they are contributing to the problems related to desertification. Without the plants (especially the trees) around, the rest of the biome cannot thrive.



Farming Practices: Some farmers do not know how to use the land effectively. They may essentially strip the land of everything that it has before moving on to another plot of land. By stripping the soil of its nutrients, desertification becomes more and more of a reality for the area that is being used for farming.

An aerial photograph of a vineyard on a hillside. The rows of grapevines are arranged in a grid pattern, following the contours of the land. The vines are a vibrant green color. The ground between the rows is a mix of brown soil and some sparse vegetation. In the background, there are more trees and a denser forest. The text "LAND RESOURCES" is overlaid in the center of the image in a bold, black, sans-serif font.

LAND RESOURCES

INDEX



LAND
DEGRADATION



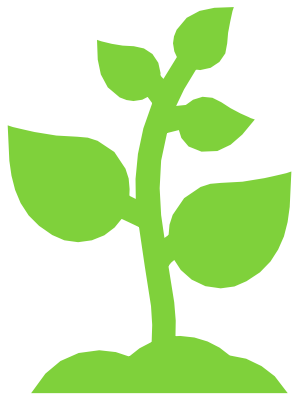
MAN INDUCED
LANDSLIDES



SOIL EROSION



DESERTIFICATION



LAND DEGRADATION

WHAT IS LAND DEGRADATION ?



Land degradation is a process in which the value of the biophysical environment is affected by a combination of human-induced processes acting upon the land. It is viewed as any change or disturbance to the land perceived to be deleterious or undesirable. Natural hazards are excluded as a cause; however human activities can indirectly affect phenomena such as floods and bush fires.

CAUSES OF LAND DEGRADATION

- ▶ Land clearance, such as clearcutting and deforestation
- ▶ Agricultural depletion of soil nutrients through poor farming practices
- ▶ Livestock including overgrazing and overdrafting
- ▶ Inappropriate irrigation and overdrafting
- ▶ Urban sprawl and commercial development
- ▶ Vehicle off-roading
- ▶ Quarrying of stone, sand, ore and minerals
- ▶ Exposure of naked soil after harvesting by heavy equipment
- ▶ Dumping of non-biodegradable trash, such as plastics





MAN INDUCED LANDSLIDES

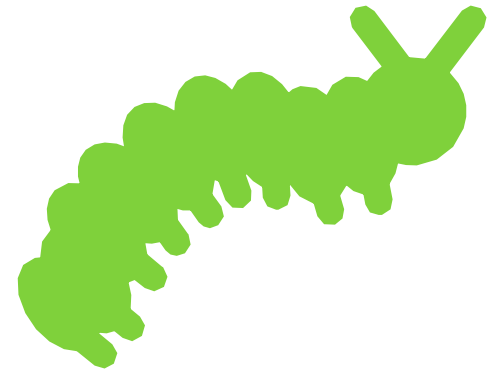
Human-induced landslides (HIL) refer to landslide events that are directly triggered or partially aggravated by anthropogenic activities. Most of them are the results of anthropogenic factors such as modification of the topography, change of the water circulations, land use changes, ageing of infrastructure, etc.



SOIL EROSION

The image features a row of five young green plants of varying heights, growing from a dark, textured mound of soil. The plants are arranged from left to right, showing a clear progression in size and leaf development. The background is a soft, out-of-focus green, suggesting a natural outdoor setting. The text 'SOIL EROSION' is prominently displayed in the center of the image in a bold, black, sans-serif font. A decorative green and black geometric shape is visible in the bottom-left corner.

Soil erosion is the displacement of the upper layer of soil, it is one form of soil degradation. This natural process is caused by the dynamic activity of erosive agents, that is, water, ice (glaciers), snow, air (wind), plants, animals, and humans.



PREVENTION OF SOIL EROSION



THE MOST EFFECTIVE KNOWN METHOD FOR EROSION PREVENTION IS TO INCREASE VEGETATIVE COVER ON THE LAND, WHICH HELPS PREVENT BOTH WIND AND WATER EROSION

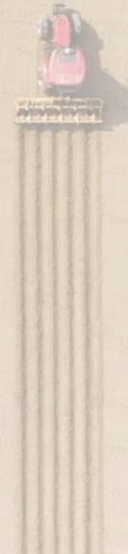


TERRACING IS AN EXTREMELY EFFECTIVE MEANS OF EROSION CONTROL, WHICH HAS BEEN PRACTICED FOR THOUSANDS OF YEARS BY PEOPLE ALL OVER THE WORLD.



WINDBREAKS (ALSO CALLED SHELTERBELTS) ARE ROWS OF TREES AND SHRUBS THAT ARE PLANTED ALONG THE EDGES OF AGRICULTURAL FIELDS, TO SHIELD THE FIELDS AGAINST WINDS.

DESERTIFICATION



DESERTIFICATION

Desertification is a type of land degradation in which a relatively dry area of land becomes a desert, typically losing its bodies of water as well as vegetation and wildlife. It is caused by a variety of factors, such as through climate change (particularly the current global warming) and through the overexploitation of soil through human activity.



#IRONY ☹️

CAUSES OF DESERTIFICATION



Overgrazing: Animal grazing is a huge problem for many areas that are starting to become desert biomes. If there are too many animals that are overgrazing in certain spots, it makes it difficult for the plants to grow back, which hurts the biome and makes it lose its former green glory.



Deforestation: When people are looking to move into an area, or they need trees in order to make houses and do other tasks, then they are contributing to the problems related to desertification. Without the plants (especially the trees) around, the rest of the biome cannot thrive.



Farming Practices: Some farmers do not know how to use the land effectively. They may essentially strip the land of everything that it has before moving on to another plot of land. By stripping the soil of its nutrients, desertification becomes more and more of a reality for the area that is being used for farming.

An aerial photograph of a vineyard on a hillside. The rows of grapevines are arranged in a grid pattern, following the contours of the land. The vines are a vibrant green color. The ground between the rows is a mix of brown soil and some sparse vegetation. In the background, there are more trees and a denser forest. The text "LAND RESOURCES" is overlaid in the center of the image in a bold, black, sans-serif font.

LAND RESOURCES

INDEX



LAND
DEGRADATION

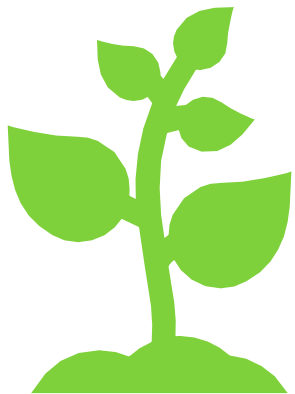


MAN INDUCED
LANDSLIDES



SOIL EROSION

D



LAND DEGRADATION

WHAT IS LAND DEGRADATION ?



Land degradation is a process in which the value of the biophysical environment is affected by a combination of human-induced processes acting upon the land. It is viewed as any change or disturbance to the land perceived to be deleterious or undesirable. Natural hazards are excluded as a cause; however human activities can indirectly affect phenomena such as floods and bush fires.

CAUSES OF LAND DEGRADATION

- ▶ Land clearance, such as clearcutting and deforestation
- ▶ Agricultural depletion of soil nutrients through poor farming practices
- ▶ Livestock including overgrazing and overdrafting
- ▶ Inappropriate irrigation and overdrafting
- ▶ Urban sprawl and commercial development
- ▶ Vehicle off-roading
- ▶ Quarrying of stone, sand, ore and minerals
- ▶ Exposure of naked soil after harvesting by heavy equipment
- ▶ Dumping of non-biodegradable trash, such as plastics





MAN INDUCED LANDSLIDES

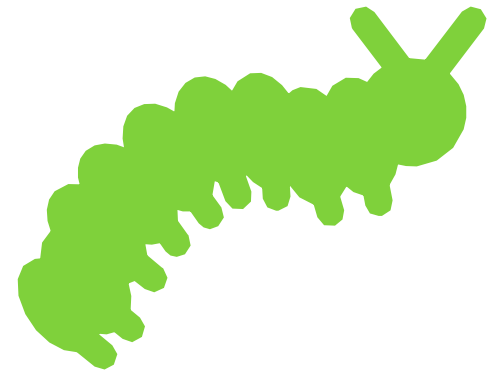
Human-induced landslides (HIL) refer to landslide events that are directly triggered or partially aggravated by anthropogenic activities. Most of them are the results of anthropogenic factors such as modification of the topography, change of the water circulations, land use changes, ageing of infrastructure, etc.



SOIL EROSION



Soil erosion is the displacement of the upper layer of soil, it is one form of soil degradation. This natural process is caused by the dynamic activity of erosive agents, that is, water, ice (glaciers), snow, air (wind), plants, animals, and humans.



PREVENTION OF SOIL EROSION



THE MOST EFFECTIVE KNOWN METHOD FOR EROSION PREVENTION IS TO INCREASE VEGETATIVE COVER ON THE LAND, WHICH HELPS PREVENT BOTH WIND AND WATER EROSION.

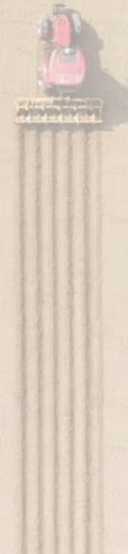


TERRACING IS AN EXTREMELY EFFECTIVE MEANS OF EROSION CONTROL, WHICH HAS BEEN PRACTICED FOR THOUSANDS OF YEARS BY PEOPLE ALL OVER THE WORLD.



WINDBREAKS ARE ROWS OF PLANTED AGRICULTURAL

DESERTIFICATION



DESERTIFICATION

Desertification is a type of land degradation in which a relatively dry area of land becomes a desert, typically losing its bodies of water as well as vegetation and wildlife. It is caused by a variety of factors, such as through climate change (particularly the current global warming) and through the overexploitation of soil through human activity.



#IRONY ☹️

CAUSES OF DESERTIFICATION



Overgrazing: Animal grazing is a huge problem for many areas that are starting to become desert biomes. If there are too many animals that are overgrazing in certain spots, it makes it difficult for the plants to grow back, which hurts the biome and makes it lose its former green glory.



Deforestation: When people are looking to move into an area, or they need trees in order to make houses and do other tasks, then they are contributing to the problems related to desertification. Without the plants (especially the trees) around, the rest of the biome cannot thrive.



Farming Practices: Some farmers do not know how to use the land effectively. They may essentially strip the land of everything that it has before moving on to another plot of land. By stripping the soil of its nutrients, desertification becomes more and more of a reality for the area that is being used for farming.

An aerial photograph of a vineyard on a hillside. The rows of grapevines are arranged in a grid pattern, following the contours of the land. The vines are a vibrant green color. The ground between the rows is a mix of brown soil and some sparse vegetation. In the background, there are more trees and a denser forest. The text "LAND RESOURCES" is overlaid in the center of the image in a bold, black, sans-serif font.

LAND RESOURCES

INDEX



LAND
DEGRADATION

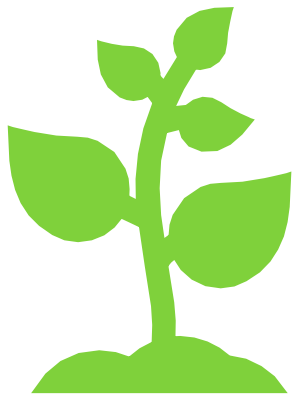


MAN INDUCED
LANDSLIDES



SOIL EROSION

D



LAND DEGRADATION

WHAT IS LAND DEGRADATION ?



Land degradation is a process in which the value of the biophysical environment is affected by a combination of human-induced processes acting upon the land. It is viewed as any change or disturbance to the land perceived to be deleterious or undesirable. Natural hazards are excluded as a cause; however human activities can indirectly affect phenomena such as floods and bush fires.

CAUSES OF LAND DEGRADATION

- ▶ Land clearance, such as clearcutting and deforestation
- ▶ Agricultural depletion of soil nutrients through poor farming practices
- ▶ Livestock including overgrazing and overdrafting
- ▶ Inappropriate irrigation and overdrafting
- ▶ Urban sprawl and commercial development
- ▶ Vehicle off-roading
- ▶ Quarrying of stone, sand, ore and minerals
- ▶ Exposure of naked soil after harvesting by heavy equipment
- ▶ Dumping of non-biodegradable trash, such as plastics





MAN INDUCED LANDSLIDES

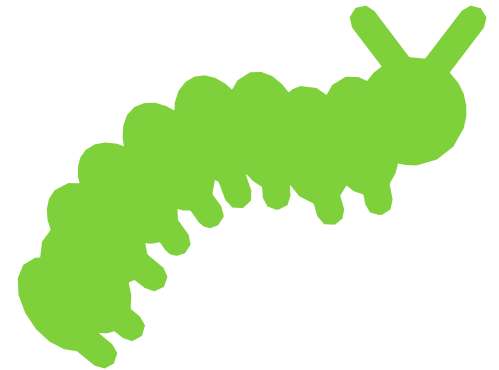
Human-induced landslides (HIL) refer to landslide events that are directly triggered or partially aggravated by anthropogenic activities. Most of them are the results of anthropogenic factors such as modification of the topography, change of the water circulations, land use changes, ageing of infrastructure, etc.



SOIL EROSION



Soil erosion is the displacement of the upper layer of soil, it is one form of soil degradation. This natural process is caused by the dynamic activity of erosive agents, that is, water, ice (glaciers), snow, air (wind), plants, animals, and humans.



PREVENTION OF SOIL EROSION



THE MOST EFFECTIVE KNOWN METHOD FOR EROSION PREVENTION IS TO INCREASE VEGETATIVE COVER ON THE LAND, WHICH HELPS PREVENT BOTH WIND AND WATER EROSION.

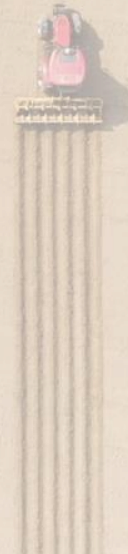


TERRACING IS AN EXTREMELY EFFECTIVE MEANS OF EROSION CONTROL, WHICH HAS BEEN PRACTICED FOR THOUSANDS OF YEARS BY PEOPLE ALL OVER THE WORLD.



WINDBREAKS ARE ROWS OF PLANTED AGRICULTURAL

DESERTIFICATION



DESERTIFICATION

Desertification is a type of land degradation in which a relatively dry area of land becomes a desert, typically losing its bodies of water as well as vegetation and wildlife. It is caused by a variety of factors, such as through climate change (particularly the current global warming) and through the overexploitation of soil through human activity.



#IRONY 

CAUSES OF DESERTIFICATION



Overgrazing: Animal grazing is a huge problem for many areas that are starting to become desert biomes. If there are too many animals that are overgrazing in certain spots, it makes it difficult for the plants to grow back, which hurts the biome and makes it lose its former green glory.



Deforestation: When people are looking to move into an area, or they need trees in order to make houses and do other tasks, then they are contributing to the problems related to desertification. Without the plants (especially the trees) around, the rest of the biome cannot thrive.



Fa
fa
u
m
o
m
la
n
b
re
u



THANK
YOU