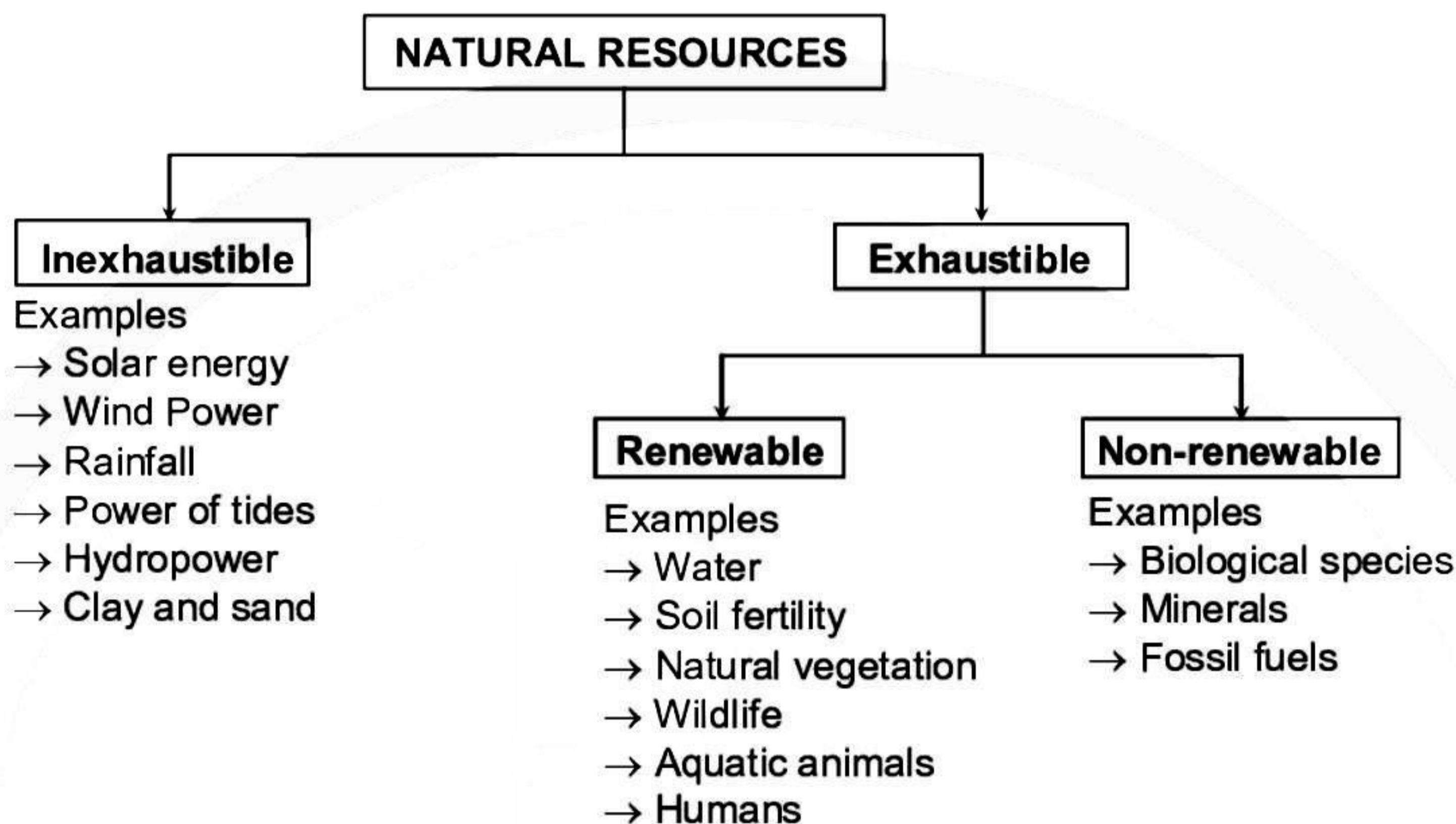


NATURAL RESOURCES

Natural resource

The word 'resource' is used for means of supplying a material generally held in reserve.



Components of atmosphere

Component	Volume
Nitrogen (N ₂)	78.08%
Oxygen (O ₂)	20.92%
Carbon dioxide (CO ₂)	0.03%**
Argon	0.93%
Trace components*	0.04%

- Lower part of **troposphere** is the reservoir of gases that are essential for life, e.g., oxygen and carbon dioxide. **Stratosphere** has protective **ozone shield** (ozonosphere) that protects us from harmful UV radiations.

Air pollution

Air pollution is defined as an undesirable change in the physical, chemical or biological characteristics of air making it harmful for organisms (including man). The agents or substances that pollute the air are called **air pollutants**. There are two main sources of air pollution (i) **natural**, and (ii) **man-made**.

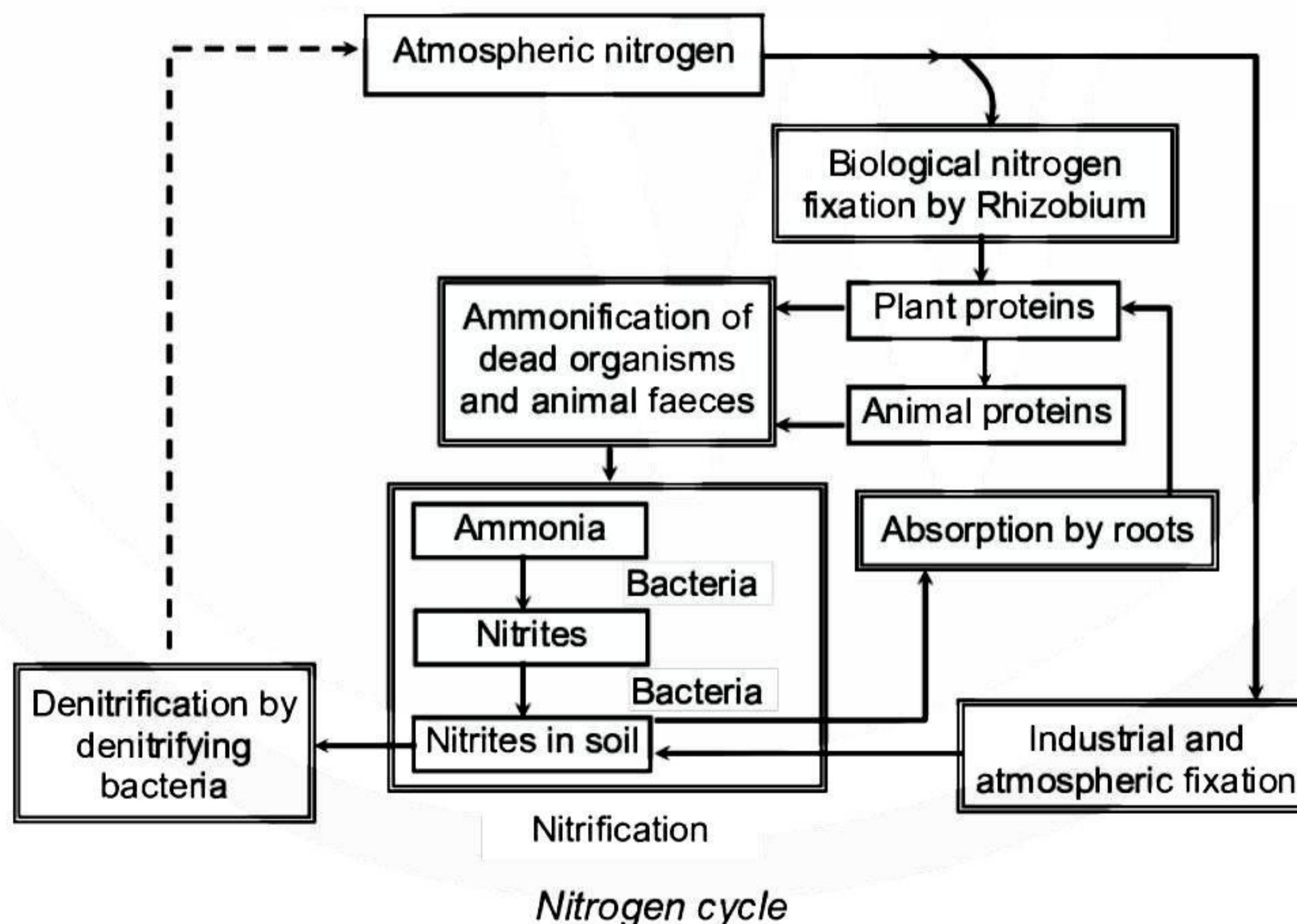
Air pollution causes numerous harmful effects. These include (i) **Respiratory problems in humans** (bronchitis, asthma, lung cancer etc.). (ii) **Carbon monoxide poisoning**, (iii) **Acid rain** (iv) **Depletion of ozone layer** thereby increasing risks of skin cancer, damage to eyes and immune system, (v) **Global warming** due to **green house effect**, and (vi) **Serious**

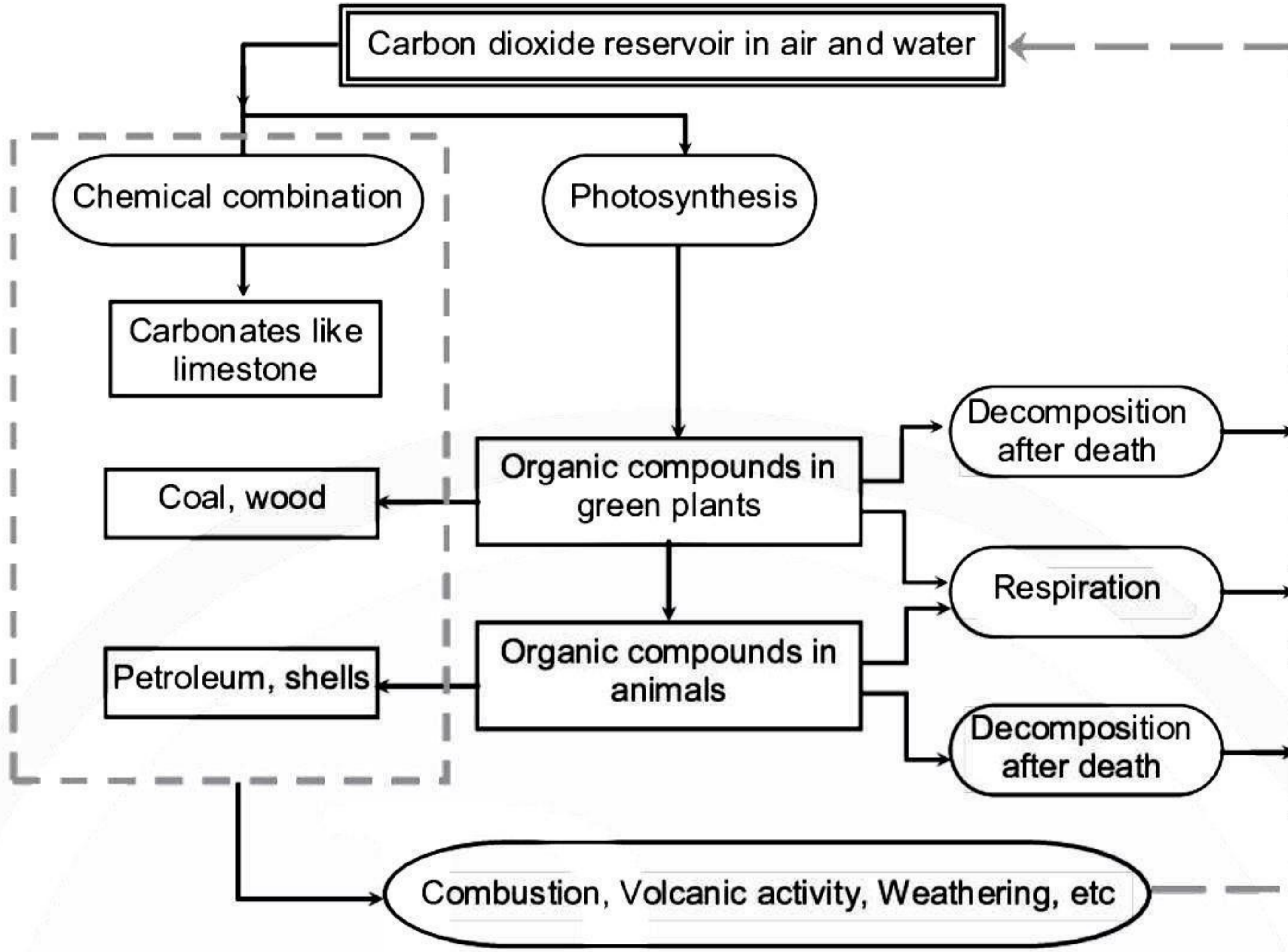


ailments

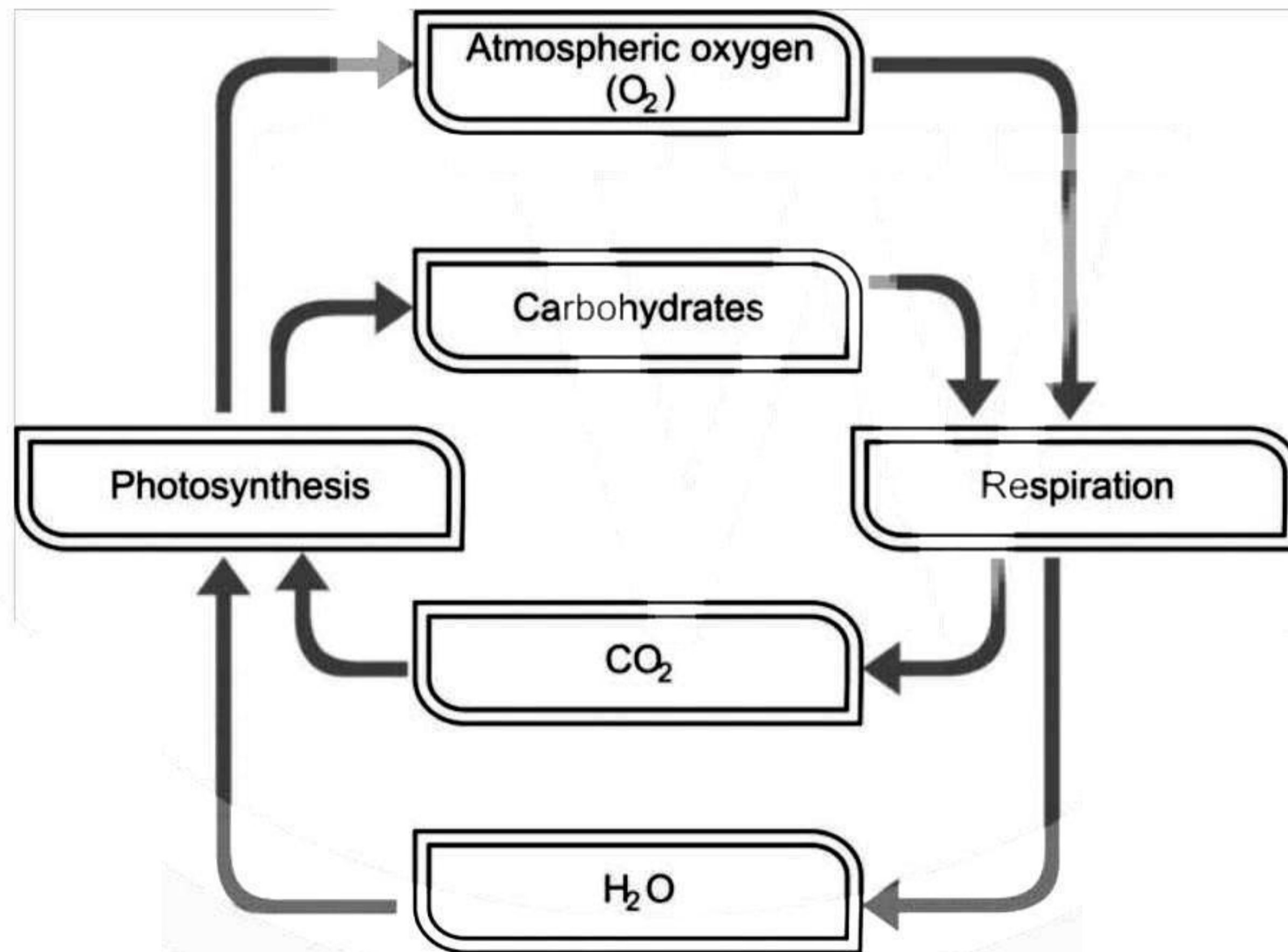
Soil Pollution and Soil Erosion

- The contamination of soil (or land) with solid waste, chemicals (through industrial wastes or acid rain), fertilizers and pesticides, reducing its fertility is called **soil pollution**. It has many harmful effects.
- The removal and transportation of top layer of soil from its original position to another place with the help of certain agents such as strong winds and fast moving water is called **soil erosion**.
- Effects of soil erosion include:
 - Reduction in the fertility of soil and desertification.
 - Landslides in hilly regions.
 - Floods and famines.
 - Silting of water reservoirs.
- Soil erosion can be prevented by:
 - Intensive cropping
 - Sowing grasses and planting of xerophytes in dry soils.
 - Terrace farming in hilly regions.
 - Proper drainage canals around the fields.
 - Making strong embankments along the river beds.





Carbon cycle



Oxygen cycle