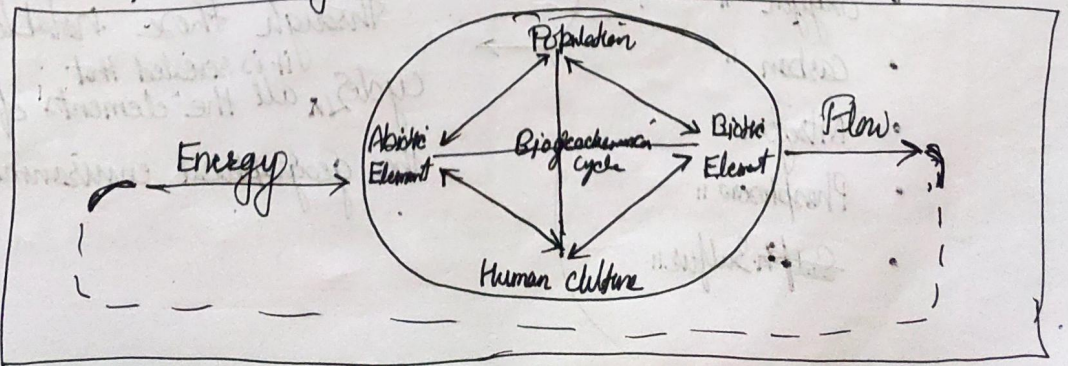


Ecology & Resource (Resource Ecology)

Although the Creator of Resources is human who can convert any physical substance or element into a resources with the help of his technology, yet the basic source of resources is the "geographical environment" which is a complex system or group. Under this, many Subsystems are included which are hierarchical (i.e. from smallest to largest specific unit). There is also Mutual interaction in this. These interrelationship of these systems and Subsystems is established by various complex bio-geochemical cycles: water cycle, oxygen cycle, Carbon cycle, Nitrogen cycle & Phosphorus cycle are particularly notable among these cycles. These cycles are regulated and governed by the flow of energy. ~~Through~~ Through these cycles, all the elements of the Biosphere, ~~are~~ from the Earth's core to the <sup>Earth's</sup> atmosphere remained intertwined.

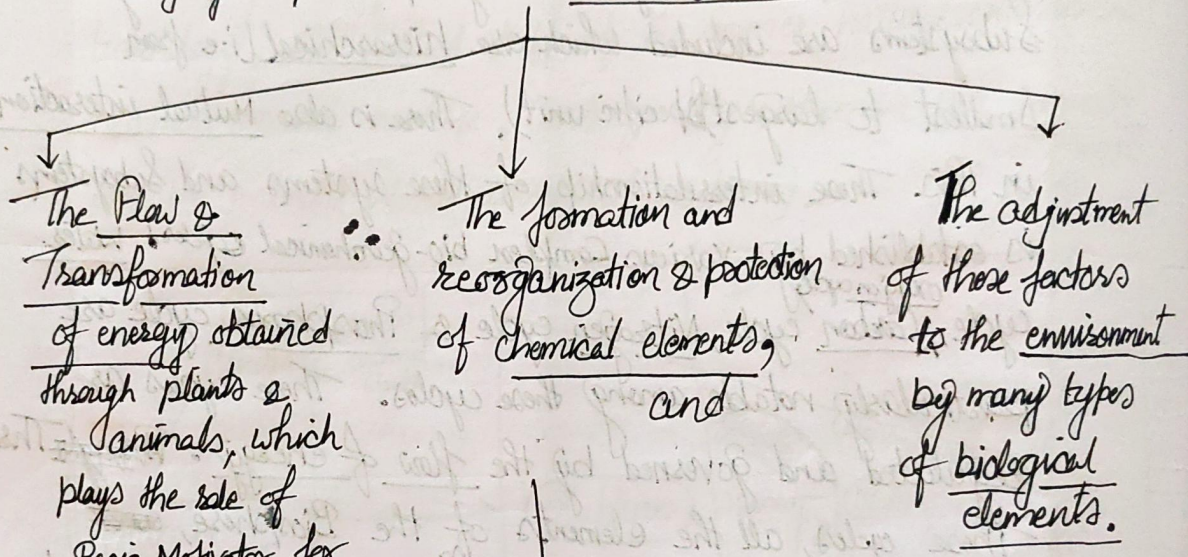
The existence of Herbivorous, Carnivorous & Omnivorous organisms is dependent on the mineral elements obtained from the soil & the plants produced by water circulation by these cycle & the energy flow through them. Similarly, Human society & its cultural system are also an integral part of this large system.





Therefore, the potential of Human resources generation is not unlimited, but depends on the energy flow and the activity of Bio-geochemical cycles.

In this scense, the entire geographical environment system is largely dependent on the three factors →



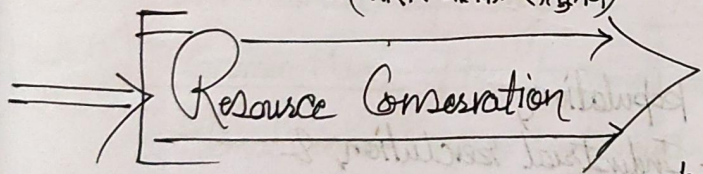
The activity of these factors is dependent on the Capacitance (क्षमता) of different cycles i.e

- Water cycles
- Oxygen "
- Carbon "
- Nitrogen "
- Phosphorus "
- ~~Calcium~~ Sulfur "

Through these notable cycles <sup>it is revealed that</sup> in all the elements of the geographical environment →



Minerals, Water, Flora & Fauna are somehow bound in a vast system which remains in a state of Equilibrium (संतुलन की स्थिति). Through these balances & interaction of elements, Resources are created. If this process is disturbed, the balance will be hampered. This has been termed as Resource Ecology. Resource Ecology emphasises the fact that every element of the geography environment (including humans) is interacted & interrelated with every other element. Therefore, it is necessary to make a close assessment of the short & long term impact of every human action on the biological-physical environment and to establish a balance between economic imperatives (आर्थिक आवश्यकता) & ecological balance (परिस्थितिकी संतुलन).



Resources are vital for human survival as well as

for maintaining the quality of life ~~also~~ and for any developmental activity. But irrational consumption & over utilization of resources may lead to socio-economic & environmental problems. To overcome this, resource conservation at various levels is important. This had been the main concern of the leaders and thinkers in the past. For instance, Gandhiji ~~was said~~ <sup>was</sup> voicing his concern