BIO-DIVERSITY

1. There are amazing varieties of life form on the earth 2. They all are included in a term bio-diversity.

3. Biodiversity is the sum total of living organisms living in different habitats. Here all flora and fauna are interrelated.

4. A/c to U.S. Office of Technology Assessment (1987). Bio-diversity or Biological-diversity is "the variety or variability among the living creatures of entire world and their ecological complexes.

5. In reality, Biodiversity is the number of species found in a given community i.e. measure known as <u>species richness</u>.

6. Species richness is the number of species per unit area. It is the simple method to measure the species diversity.

7. Species diversity refers to the variety of species in region or the number of species in a community of organisation

8. Gradually species richness is greater, the greater is sps diversity

9. The number of individual among the species relating the difference into evenness or ~~equalities~~ equalitibilities or consequent is diversity.

10. Simply biological diversity is a term in which the species richness and its evenness are compounded.

Measurement of Bio-diversity

1. Bio-diversity can be measured as
   - → α - Alpha Biodiversity
   - → β - Beta ,,
   - → γ - Grama ,,

2. The another critisia of measurement is
   - ⟷ Genetic Biodiversity
   - ⟷ Species ,,
   - ⟷ Community ,,
   - ⟷ Ecosystem ,,

→ α-Biodiversity → When biodiversity is measured on the earth and covers only one dimensional aspect i.e. for a given locality, it is called α- biodiversity. It is reffered to species richness.

→ β- Biodiversity → When biodiversity is measured in the two dimensional aspect in an aquatic system, it is known as β- Biodiversity.

→ γβ- Biodiversity → Biodiversity is ~~known as a three~~ measured as a three-dimensional ecosystem i.e. atmospheric bio-diversity, the measure is known as Gramma or Delta bio-diversity.

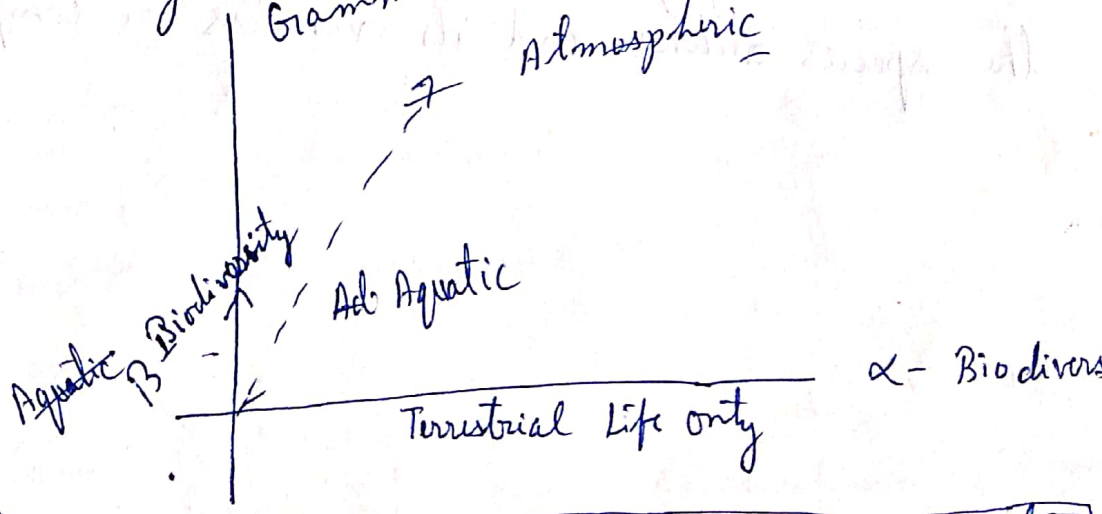


Fig: Comparison of Measurement of Bio-diversity

γ- Community diversity.

↔ Genetic Biodiversity → The variability or diversity at gene level in an organism exists i.e. known as Genetic level biodiversities. No two genes of an organism are traced as similar.

↔ Species Biodiversity → The number of species increases the Biological diversity increases as.

Fig (1)

I S+ type of Bird	I S+ type of Bird.	II Type of Bird
I S+ type of Bird.	II nd type of Bird.	I St type of Bird

Low-level of Bio-diversity.

Fig (2)

I S+ type of Bird.	II nd type of Bird.	
I St type of Bird.	III rd type of Bird.	
II nd type of Bid.	IV th type of Bird.	

Enhancement of Biodiversity

Some higher (or more) level of Biodiversity.

Fig (3)

I S+ type Bird	II type mammal	III rd type Fish.
I S+ type mammal	II type Bird	III rd type mammal

max. Bid-diversity

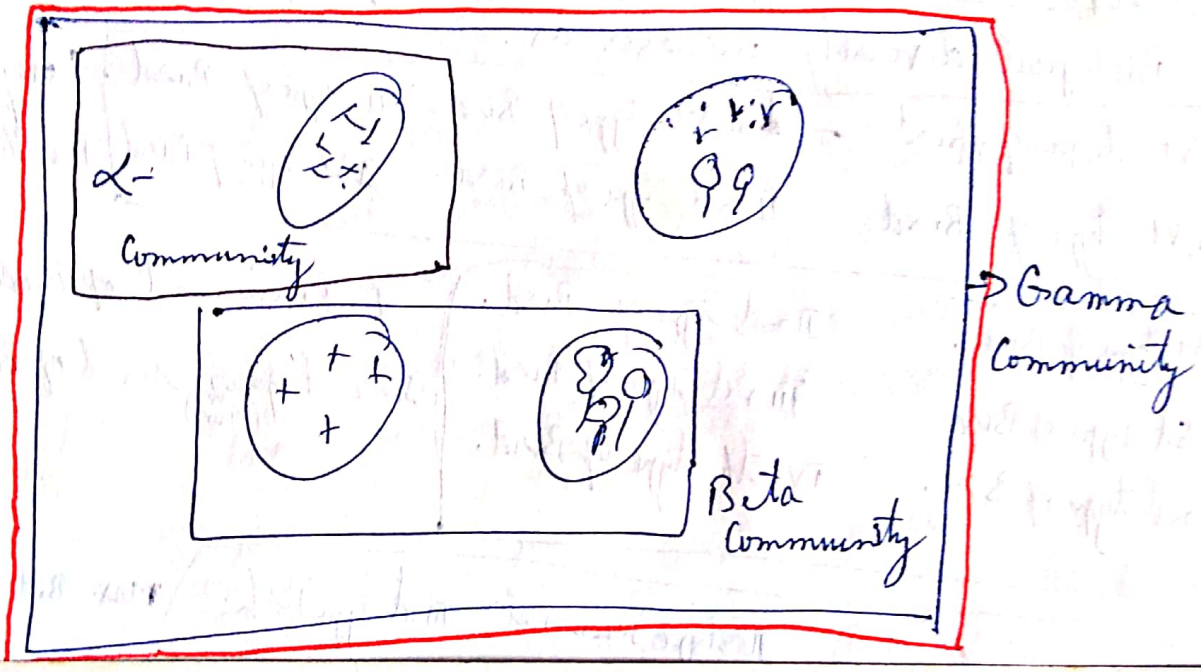
↔ Community Biodiversity → This is varities within/among community. Hence Intra or / Inter community Biodiversity.

↔ Ecosystem - Level Biodiversity - It is the variability among two or more different communities of the ecosystem. It is sub-devided as → α- Community
→ β- Community.
→ γ- Community

(A) α- Community diversity → The biodiversity is within the community means the individuals intract within the community.

(B) β- Community diversity → The two communities intract each other by co-operation in all levels are called β- β- Community diversity.

(c) Y- Community Bio diversity → More than two community interact and co-operate each other in case of habit, adaptation, reproduction, shows Gamma Community biodiversity.



Objectives

Some of the main objectives are

→ Maintain essential process and life support system (air, water and soil).

→ Ensure that any material of world's organism.

→ Pressure the biodiversity of species or the range genetic material of world's organism.