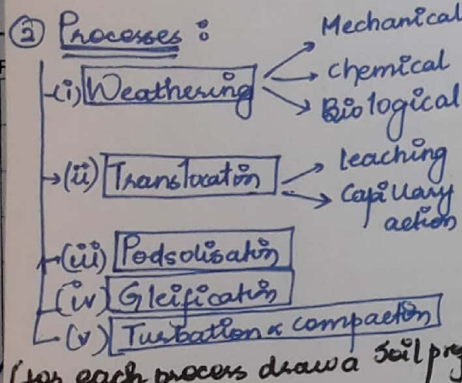
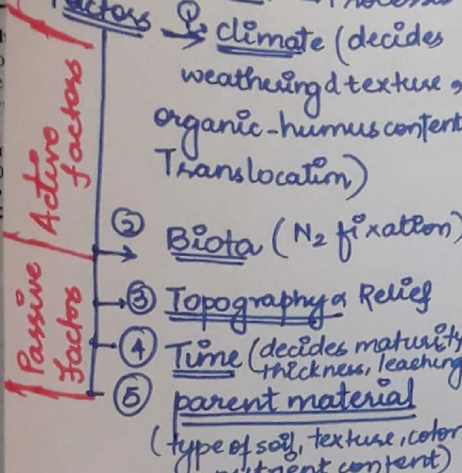
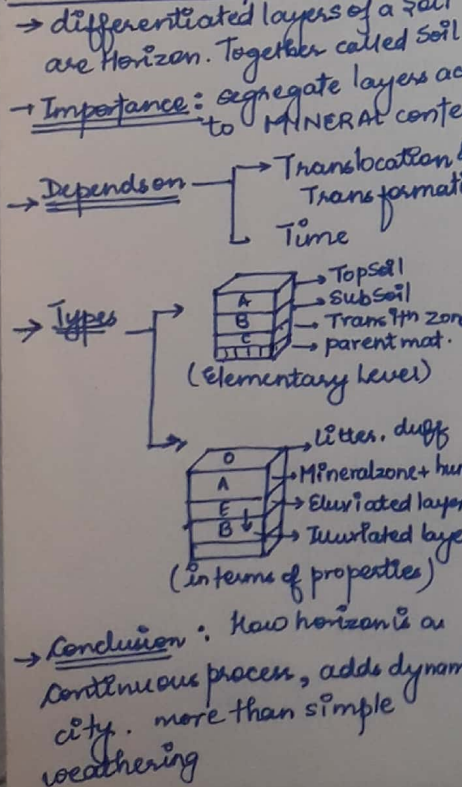


# BIOGEOGRAPHY

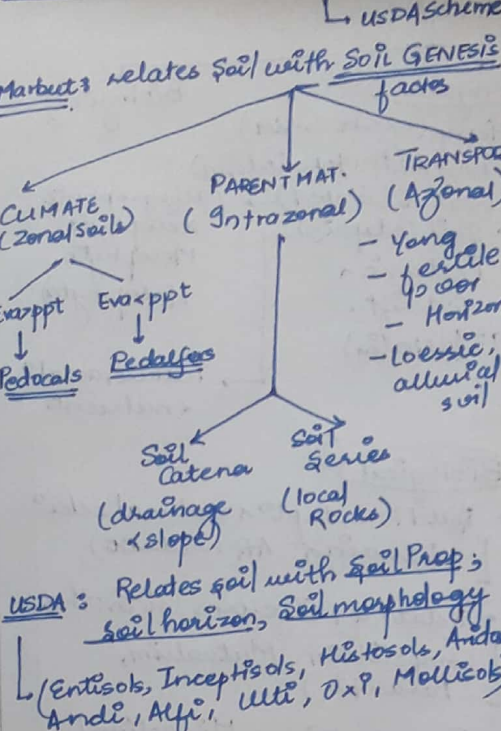
## Genesis of Soil



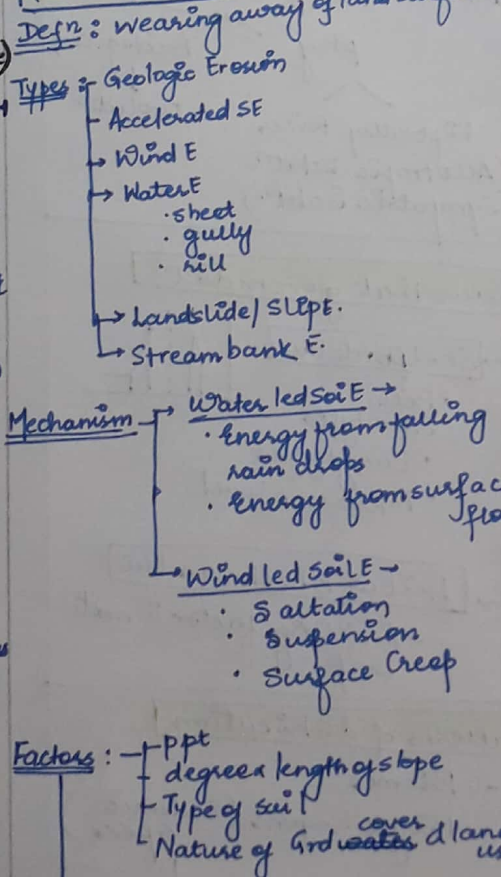
## SOIL HORIZON / SOIL PROFILE



## SOIL CLASSIFICATION

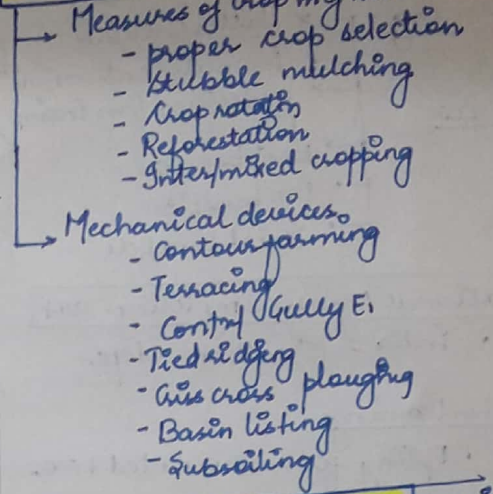


## SOIL EROSION

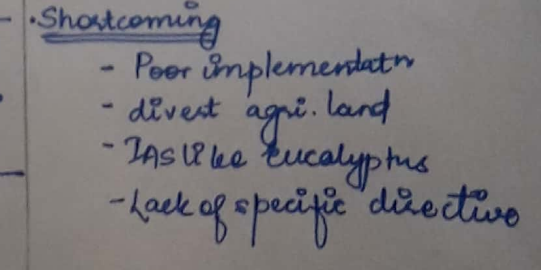
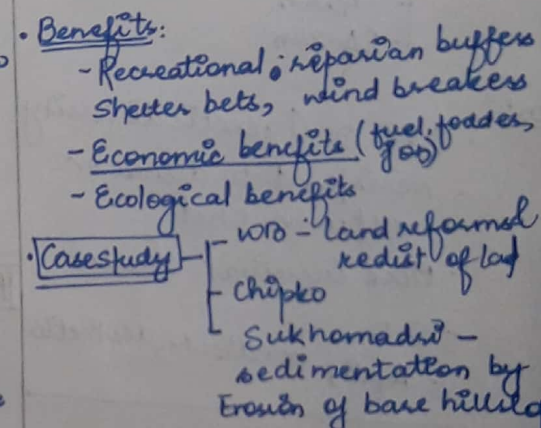
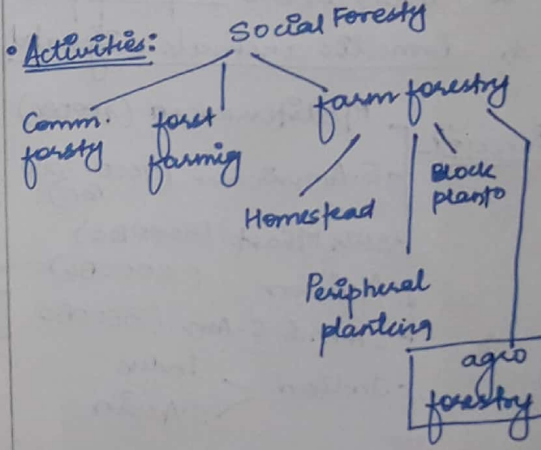
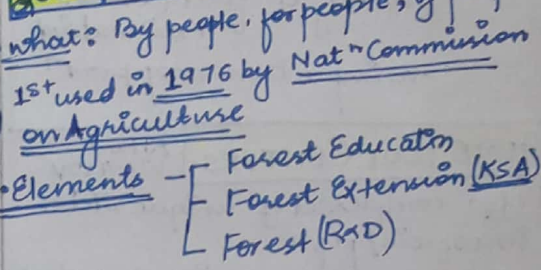


<b>Climate</b>	<b>Topography</b>	<b>Lithology</b>	<b>Vegetation</b>
Intensity, duration, dist of rain fall	Relief & slope	Rocks & phys prop	density, types of cover
Temp, Wind	<b>Soil factor</b>	<b>Human land use</b>	mining, farm proc
	Erosion		

## SOIL CONSERVATION



## SOCIAL & AGRO FORESTRY





# AGRO FORESTRY

- Defn: Type of soc forestry where indi farmers undertake tree farming

## Benefits

- Litter/mulch
- ↑ soil nutrient content
- protection from erosion
- Env't benefits
- Eco benefits
- Social benefits

## National Agro forestry Policy - 2014

- India - 1<sup>st</sup> nation to adopt

## Shortcomings

- Opting for mkt oriented trees
- Benefitted big farmers
- Scarcity of food industrial raw material
- -ve impact on crop prod<sup>n</sup>

# GENE POOL CENTERS

NICOLI WAVILOV

Defn: complex set of unique alleles in a species/pop<sup>n</sup>

- areas where imp crop plants & domestic animals originated

## Major

- Mediterranean (4000BC)
- S. American (7000-3000 BC)
- SW & MEast (8000BC)
- African (5000BC)
- S. Am & C. Am (3500BC)
- Indian < Indus & S. Asian
- Asian
- EA Asian

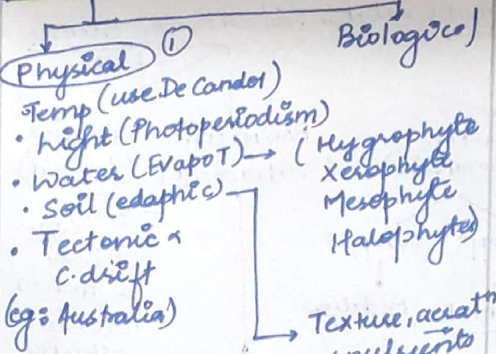
## Imp:

- ↑ GP ⇒ ↑ genetic diversity
- resistant to disease or extreme env't
- More survival chances
- S.D.
- Agril, medicine, aesthetic

# FACTORS AFFECTING dist<sup>n</sup> of Plants & animals

## Plants:

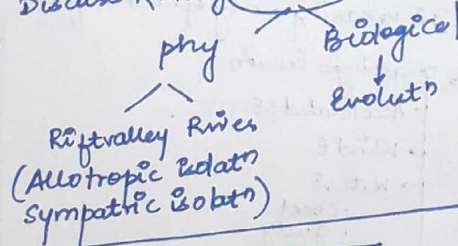
### Factors



### Biological (2)

- Relat<sup>n</sup> to adapt<sup>n</sup> & natural select<sup>n</sup> [Darwin & AR Wallace]
- Relat<sup>n</sup> of 1 lifeform w/ others [Competition, Mutualism, Parasitism]
- Reproduction & Migration/ dispersal

### Discuss Role of Barriers (3)



# Laws that govern dist<sup>n</sup>

## Shelford's law

- Bell
- Stenotypes
- Eurytypes
- Tolerance level



## Leibig Blackman's law

- Limiting factor is next imp

# Patterns of distribution

- Biomes
- Bidgeo Regions (endemic species)
- Gene pool Center

