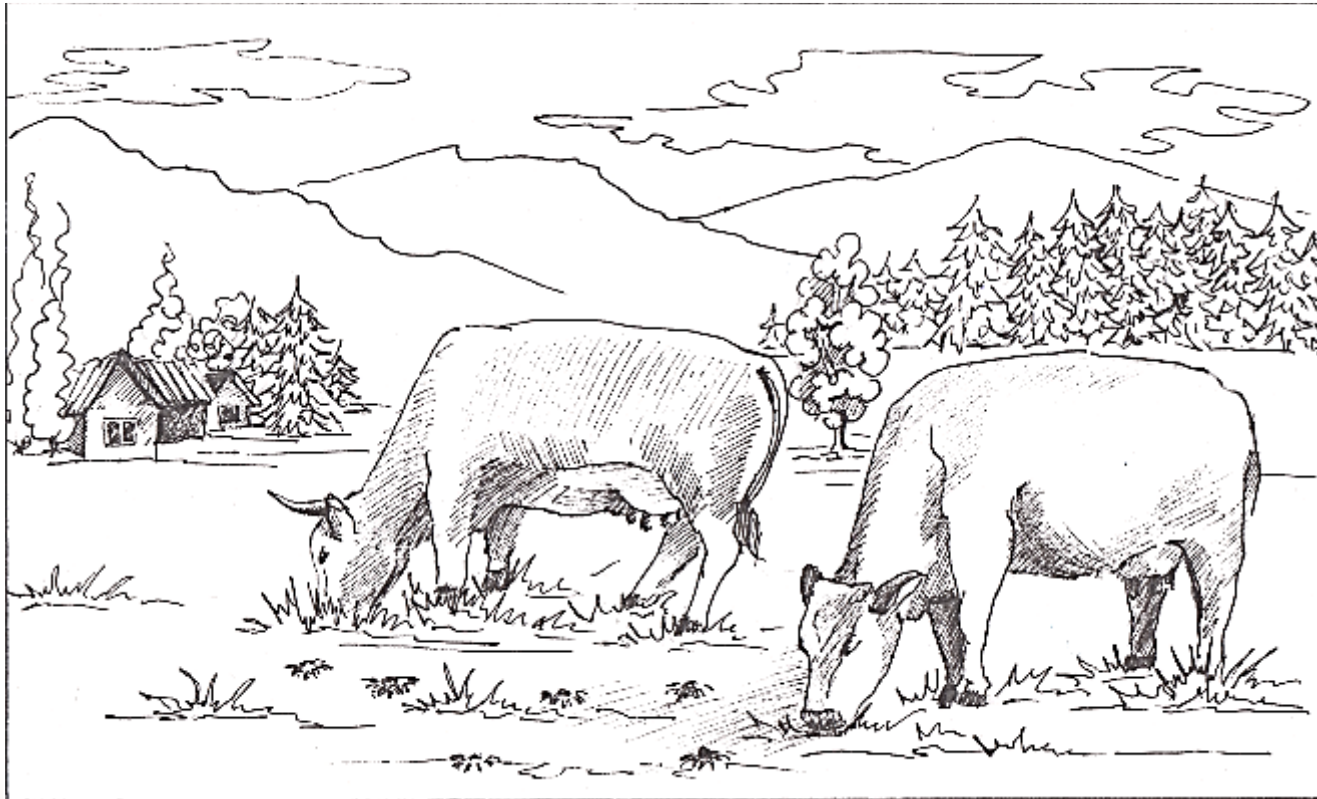




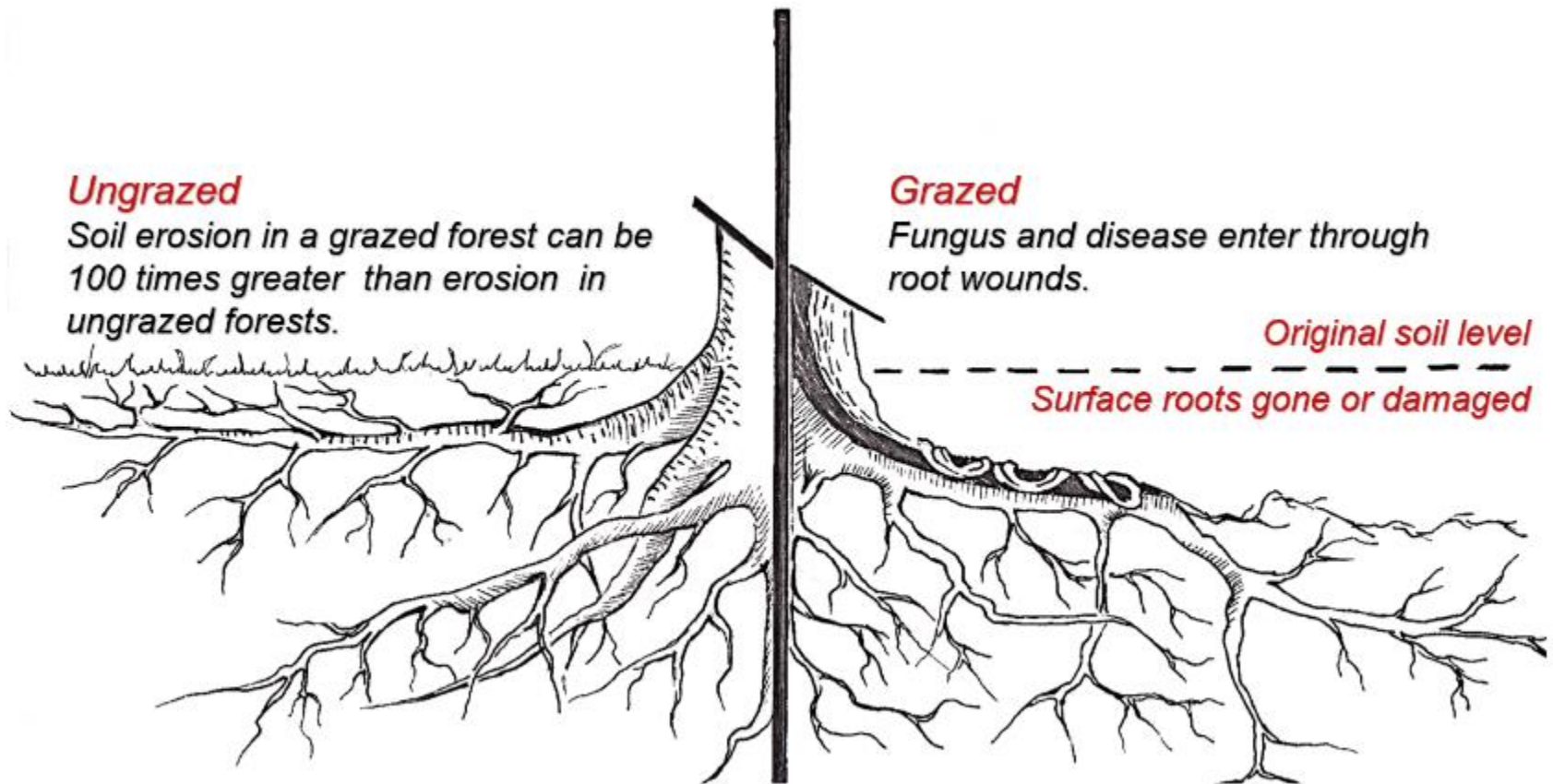
# Forest and Pasture Management

Place, Date





## Impacts of grazing on forest plots





## When can livestock graze on forest plots

- Between full grown trees
- In a separately fenced area
- If legal land use rights for grazing is given
- Young forest
- Unprotected tree seedlings
- If forest plot is prone to soil erosion
- If land use rights for grazing are not given

*If grazing on the forest plot harms the trees, fodder production could be a beneficial alternative*



# Protection of forests or individual trees

- Types of fences
  - Single tree fencing
  - Living fences
  - Full area fencing







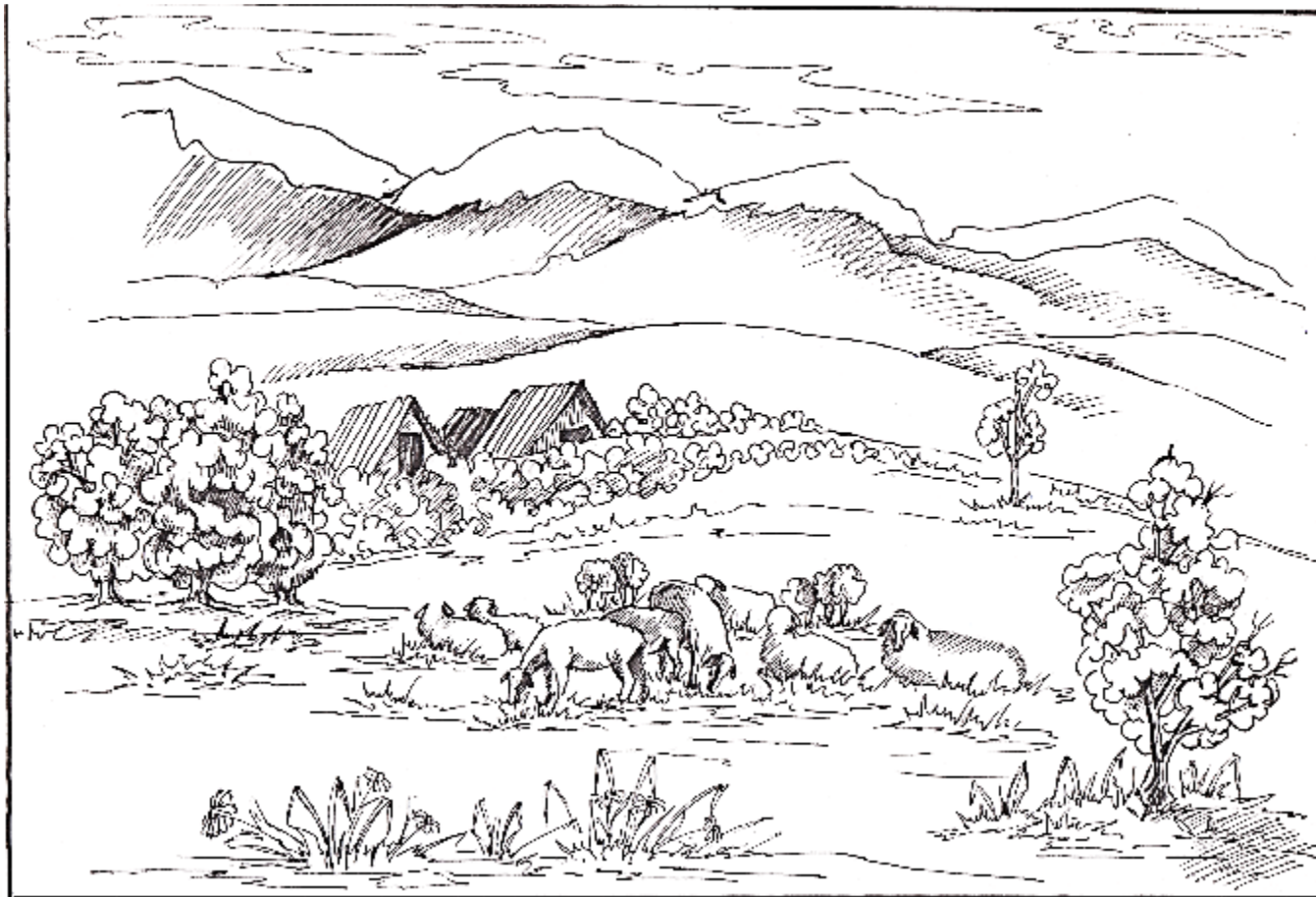
# Fodder production

Local varieties of fodder crops:

- *Trifolium pretense* – (клевер красный)
- *Medicago minima* – (люцерна округлая)
- *Vicia sativa* – (вика)
- *Medicago sativa* - (люцерна)
- *Carex pachystylis* – (осока)



# Pasture management techniques





## Causes of reduced pasture productivity

- Too much livestock
- Lack of pasture rotation system
- Soil erosion on pastures
- Reduced or low soil fertility
- Increase in non edible plants
- Lack of good quality pasture seeds or absence of seed backs



## Ways of pasture improvement

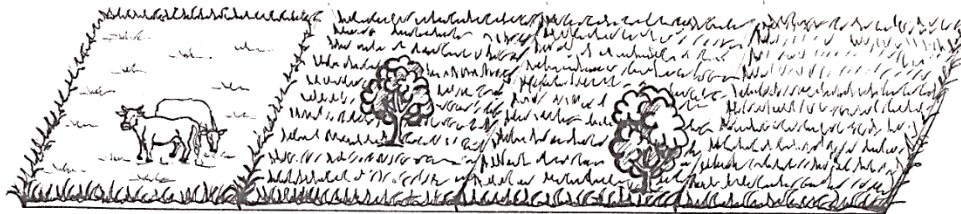
- Implementation of new methods of pasture use
  - Pasture rotation system
- Increase of pasture productivity:
  - Sowing of herbs and grass on degraded pastures
  - Cleansing of pastures from stones and non-edible plants
  - Terracing
  - Irrigation of highland pastures and provision of foothill pastures with drinking water





# Pasture rotation system

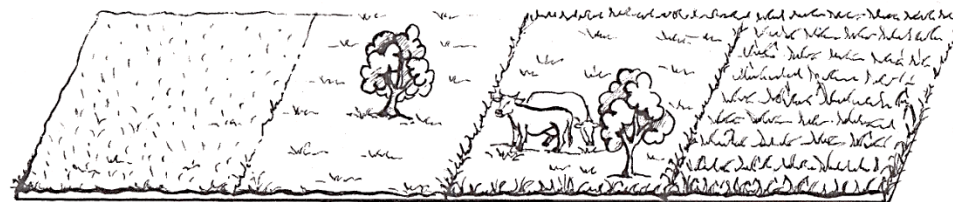
1<sup>st</sup> week



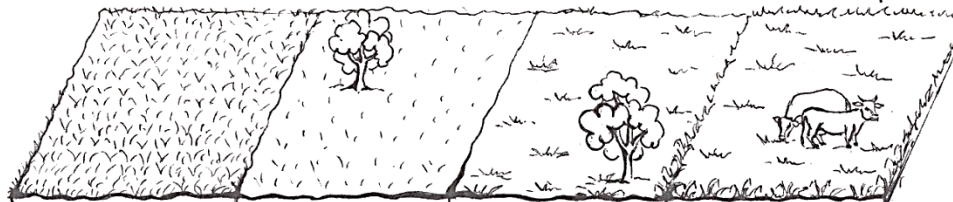
2<sup>nd</sup> week



3<sup>rd</sup> week



4<sup>th</sup> week





# How to implement a pasture rotation plan

1. Individual users or communities should know:
  - who are the users of the pasture
  - how many cattle at what time and in what place is grazed
2. All users of pastures should agree on the number of livestock grazed on a specific pasture
3. All users of the pastures need to agree on a rotation plan
  - The implementation of the sequence of pasture use can be simulated by creating water points or a corral (enclosure).



# How to implement a pasture rotation plan

Most importantly:

- Cattle should not be grazed in pastures in early spring when the germination stage has not yet passed
- In order to preserve biomass, the livestock should not be grazed intensively on any pasture
- Every 4-5 years the pasture should not be used during one season for rest



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