GRASSLAND MANAGEMENT

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With increased number of livestock, grasslands are deteriorating and species with high nutritive value are at risk of extinction. It is therefore, essential that grasslands be managed to address these problems

Excessive grazing and mismanagement are transforming these grasslands into deserts

Based on the Carrying capacity, management strategies can be implemented which can regenerate and maintain grasslands

Treatments for increasing grassland fodder species

❖Soil and water conservation

Erosional processes can be reduced with treatments such as gully plugs, check dams and contour trenching / bunding

❖Seeding

Seeds should be sown before the first rain when there is no fresh growth of existing grasses. Mix fresh seeds with cow manure and clay to form pellets which will not be carried away by wind /water

❖Fertilizers

Manure, nitrogenous and phosphatic fertilizers can broadcasted to restore productivity of grasslands.

Establishing a grazing system for grasslands

- **Controlled continuous grazing**

  Grazing until a set minimum amount of preferred grasses remain
  Easy to manage and involves no additional costs

- **Deferred grazing**

  Based on the deferred area, grazing will be carried out

- **Rotational grazing**

  Allowing animals to graze in different sub-units of the grassland in rotation

- **Deferred and rotational grazing**

  Sub-units of the grassland is grazed for one-third of the season

USEFUL PLANT SPECIES

Limited rainfall and high temperature contribute to scarcity of food, water, fuel and fodder

Sheep and goats are common as they resist dry conditions
Cows and buffaloes - less due to shortage of fodder and water

Trees which can provide fodder even during summer months are needed

USEFUL TREES FOR RAINFED DRYLANDS

- **For strong roots and conservation**

  Trees with well developed root system

  Prosopis juliflora*, *Azadirachta indica* & *Albizzia lebbeck

- **For fodder and fuel**

  Trees for fuel

  Prosopis juliflora*, *Prosopis cineraria* & *Acacia nilotica

- **For income and nutrition**

  Fruit trees for more income and nutrition

  Zizyphus mauritiana, Punica granatum* & *Phoenic dactylefoum

- **For salt affected areas**

  Salt tolerant trees in brackish ground water area

  Prosopis juliflora*, *Prosopis cineraria* & *Azadirachta indica

USEFUL TREES FOR RAINFED DRYLANDS

Planting Techniques

- Planting trees along with cultivable crops
- Suitable combination of crops with trees should be adopted for optimum returns
- Excess number of trees should be reduced as they result in problem of birds, shade and nutrition competition

- **Productivity of grasslands can be enhanced by the integral management practices**

- **Based on knowledge of carrying capacity appropriate grazing system can be identified so as to manage grassland in a proper way**

- **Regeneration and maintenance of grasslands is possible through appropriate agrostological measures**