

Definition

Forage crop refers to grass, legumes and other forms of herbage that are eaten or grazed by especially ruminant farm animals. They may be raised by man in **man-made or artificial pastures** or could grow naturally in **uncultivated** pastures.

These uncultivated pastures that are rich in forage legumes, grasses, fodder crops and small trees is referred to as **natural grazing or Rangeland**. The nomadic cattle rearers in their characteristics North-South migratory life herd their livestock through the Rangeland of Nigeria. There is material evidence to prove that natural grazing often provide the major source of forage available to the greater majority of livestock owners in Nigeria.

Importance of Rangeland and Natural Grazings

1. Major source of herbage in the tropics.
2. It could be preserved into hay/silage especially when cut before flowering.
3. Animals under range obtain maximum bodily exercise
4. The range provides a variety of forage species so that balanced diet is obtained by outdoor managed animals.
5. Dependence on the Rangeland costs the farmer almost nothing.
6. It supplies animal dung to the soil, and this increases soil fertility, infiltration, percolation and water holding capacity.

Limitation of Rangeland

1. Trampling breaks up soil surface and destroys soil structure thereby making the **soil** prone to erosion.
2. There is uncontrolled mating
3. Animals may be fatigued by distant trekking.
4. It exposes the animals to some deadly external parasites such as tsetsefly, to vemics and thieves.

5. The Rangeland is prone to devastation by wild fire
6. In some localities, absence of some biotypes or forage crop species.

Characteristics Of Good Rangeland

In establishing a pasture for the provision of livestock feed especially ruminant the characteristics of the pasture should be considered. Some of the characteristics of the pasture which are very vital include the chemical composition (nutritive value) of the digestibility of the pasture, palatability of the pasture, growth ability of the pasture, and its persistence or resistance to trampling.

Nutritive value of pasture is assessed in terms of energy availability and the content of protein, minerals and vitamins and absence of toxins. New pasture introduction need to be screened for their possible content of harmful or toxic substances. For example, *Leucaen leucoccephala* has a high content of mimosine which depresses cell division.

A good pasture should be highly digestible. Animal output is first determined by the amount of forage eaten and the proportion digested. Dry matter intake of a good quality pasture is usually about 2.5 – 3% of body weight. Digestibility can be accurately and easily estimated in the laboratory by means of in-vitro technique, in which rumen liquor collected from an animal is used to digest small samples of pasture held at constant temperature.

The grasses and legumes found in a Rangeland must be highly palatable to the animal grazing. Giant star grass-centrosema mixture is well relished by ruminants.

Pastures to be established must have a high yielding ability. The pasture should grow very fast, tall and leafy.