

SUBJECT: AGRICULTURAL SCIENCE

CLASS: J S S 2

TOPIC: ANIMAL FEEDS AND FEEDING

WEEK: 2

#### INTRODUCTION:

Feed is that which is eaten by animals to nourish their body. Good feeding has no substitute, therefore, to achieve highest returns from livestock; the farmer must supply his animals with the appropriate quantity and quality of feeds stuff.

Animal Nutrition: is the science of nourishing the body of animals .it deals with the nature and properties of animals, their proportion, and mechanisms through which they are converted to animals tissues.

#### TYPES OF FEEDS

Animal's feeds can be classified according to the quantity of fibre and moisture in the feed, and into four main groups;

- (a) Basal or energy feeds
- (b) Supplements
- (c) Concentrates
- (d) Roughages.

#### BASAL FEEDS/ENERGY FEEDS

These are feeds made to supply energy to the animals. They consist of easily digestible carbohydrates with a low content. They usually make up 60-90% of livestock rations. Basal feeds are low in fibre content and are highly acceptable to most farm animals especially the monogastrics.

#### SUPPLEMENTS/PROTEIN FEEDS

Supplements are feeds given to supply nutrients in the diet of the animals. They are usually rich in protein, and may also contain reasonable amount of vitamins and minerals. They could be fed separately or mixed with other feeds. Supplement feeds includes blood meal, fish meal, milk by-products, palm kernel cake, groundnut cake, cotton seed cake, bone meal etc.

#### CONCENTRATES

These are feeds or feeds mixtures providing all the primary dietary needs of protein, carbohydrates, fats and minerals .it may be either whole grain feeds or mixture of basal and supplement feeds.

Concentrates are usually fed monogastrics, animals but can be given as a supplement to diet of some herbivores. They have low fibre content and include bone meal, blood meal, oyster shell meal, fish meal, groundnut cake etc.

## ROUGHAGES

Roughages are plant materials rich in fibres, and provides the bulk fodder used in grazing animals. It includes the vegetative parts of plants fed fresh, succulent, or preserved and fed as hay silage or straw. Animals fed on roughages need supplements.

I. SUCCULENT FEEDS: refers to young green forages, rich in water and are easily digestible ,for example young grasses and legumes.

II. STRAW: this consists of dried plant materials and crop residues, fed to animals as a maintenance ration during periods of food scarcity; it is highly rich in fibre.

III. HAY: this is a plant material like grasses and legumes, cut at a vegetative stage, dried and baled for feeding farm animals. The objective of drying plant materials to make hay is to reduce its moisture content, and so eliminate fear of fermentation or spoilage due to mould growth.

IV.SILAGE: This refers to plant materials partly fermented In air tight receptacles and used in feeding farm animals. The process of making silage involves chopping the grasses and packing them in silage pit.it is then pressed firmly to exclude air, then covered with soil and polyethylene bags to seal it from air.

V. FORAGE: This refers to grasses and legumes used for feeding farm animals.

VI. FODDER CROPS: Are crops grown specifically to feed farm animals, for example corn, groundnut, grasses and legumes.

## POULTRY FEEDS AND FEEDING TOOLS

Poultry is usually fed with poultry mash prepared principally from cereals like maize, guinea corn, millet etc. The mash is prepared according to the age of the birds, this we have starters mash and chicks mash.