

## INTRODUCTION TO ANIMAL NUTRITION & FEED FORMULATION TRAINING

### **Course Objective**

The objectives of this course are:

- To provide participants who are desirous of starting an animal farm or a feed production factory with the necessary information to acquire the knowledge needed to understand the nutritional needs of animals and how best to get the most value from available produce.
- Acquaint participants with nutrient requirements of various animal species (e.g. Fish, Poultry, etc.) and how to spot deficiencies in animals;
- Teach participants how to formulate diets for various classes of animals based on the knowledge of digestive physiology, nutrient requirements and composition of various feedstuffs.
- Introduce participants to economic benefits of least cost formulation and feeding.

### **Course description**

This training focuses on all aspects of Animal Nutrition and Feed Formulation, taking the participants through the processes involved and ensuring an understanding of the importance of right feed in the success of an animal farm. Information provided will give the participants a clear view of what they must know and expect to successfully grow, manage and improve animal feed formulation and production.

#### **Course Overview**

Animal feed nutrient requirements, factors affecting nutrient requirement of animals. Chemistry and nutritive values of materials used in Animal feed. The course also covers feed formulation methods and calculations of ingredient mix.

#### **Course Benefits**

- 1. Provide an understanding of the nutritional needs of animals
- 2. Provide participants with the opportunity to identify symptoms of nutrient deficiency in animals.
- 3. Provide an analysis of the right feed combination.
- 4. Provide participant with different method used in feed formulation
- 5. Insightful detail into setting up profitable feed mills.

# **Course Content**

- 1. Introduction to Animal Nutrition
  - What is Nutrition?
- 2. Animal nutritional requirements
  - a. Carbohydrates
    - Sources of carbohydrates
    - Importance in animal diet
    - Factors affecting carbohydrate requirement in animal
    - Deficiency symptoms

# b. Protein Requirement

- Sources of protein
- Importance in animal diet
- Factors affecting protein requirement in animal
- Deficiency symptoms

# c. Vitamins & Minerals.

- Sources of vitamins & Minerals
- Importance in animal diet
- Factors affecting its requirements in animal
- Deficiency symptoms
- d. Fat & Oil
  - Sources of vitamins & Minerals
  - Importance in animal diet
  - Factors affecting its requirements in animal
  - Deficiency symptoms

## 3. Feed formulation

- Introduction to feed formulation
- Importance of quality feed formulation.
- Factors affecting the nutritive values of feeds
- Basic Components of Artificial Feed.
- Types of Feed
- Feed Ingredients Processing and Feed Production Technology.
- Procedures in feed formulation
- Methods of Ration Formulation.
- Feed Conversion Ratio.
- Calculation of ingredients mix to form a balance ration
- **5.** Feed Handling and storage
- 6. Economic benefits of least cost formulation.

# **Training Methods**

The training methods will include an assortment of discussions, presentations with PowerPoint slides and

flip charts, lectures

### **Target Audience**

- Retiring/Retired Civil Servants
- Bankers
- Telecommunication Workers
- All White-Collar Workers who are desirous of going into agriculture but have no prior knowledge or existence.

### **Training Details**

Duration: 4 days Dates: To be decided

