

# **CROP AND PASTURE PRODUCTION AND SUSTAINABLE ENVIRONMENT PROGRAMME**

## **RESEARCH FOCUS**

The aim of this Crop and Pasture Production programme is to produce world class students with knowledge in Crop and Pasture production with a well-balanced education and industrial experience. The graduates must be such that they can be self-reliant in all aspects of crop production, particularly; forage, crop improvement, crop protection, crop processing and agronomy. The objectives of the programme are:

- To promote professional development of graduates in Agriculture, by providing students with understanding and hands-on experience of different disciplines within the realms of crop and pasture production.
- To develop crop varieties that are adaptable to our various biotic and abiotic stresses of the environment.
- To train students who will focus on research and development in crop and pasture production.
- To train students to meet the industrial need and achieve enhanced entrepreneurial skills.

In order to achieve the set objectives, research focus will be geared towards:

1. Improvement of crops and pastures which will be beneficial to humans and animal needs in a sustainable manner. Research on crop improvement will include Breeding increased yield, salinity tolerance, reduced tannin content which improves malting properties as in sorghum.
2. Breeding for insect resistance in crops, and Improved storability of produce.
3. Understanding the physiological pathway of crops in a view of increasing their productivity.
4. Improved digestibility of pastures and forage crops.
5. Systemic analysis and evaluation of the nutrient composition of pastures and improvement of such nutrients in a sustainable manner.
6. Development of models for farming systems in a compendium of crops and animals in a sustainable manner.