

# **FACULTY OF AGRICULTURAL SCIENCES & ALLIED INDUSTRIES**

## Agronomy and its scope



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Agronomy is derived from a Greek word 'agros' means field and nomos meaning management. Principles of agronomy deal with scientific facts in relation to environment in which crops are produced.

Pietro de'Crescenzi is the father of agronomy.

#### **Definition of agronomy**

- 1. It is defined as an agricultural science deals with principles and practices of crop production and management.
- 2. Agronomy is branch of agricultural science, which deals with principles, and practices of soil, water and crop management.
- 3. It is branch of agricultural science that deals with methods which provide favorable environment to the crop for higher productivity.

### Scope of agronomy

Agronomy is a dynamic discipline with the advancement of knowledge and better understanding of planet, environment and agriculture. Agronomy science becomes imperative in agriculture in following areas.

- 1. Identification of proper season for cultivation of wide range of crops is needed which could be made possible only by agronomy science.
- 2. Proper methods of cultivation are needed to reduce the cost of cultivation and maximize the yield and economic returns.
- 3. Availability and application of chemical fertilizers has necessitated the generation of knowledge to reduce ill-effects due to excess application and yield losses due to unscientific method of application.
- 4. Water management practices play greater role in present day crisis of water demand and agronomy science answer to the questions 'how much to apply? and 'when to apply?
- 5. Availability of herbicides for control of weeds has led to a development for a vast knowledge about selectivity, time and method of its application.
- 6. Intensive farming is the need of the day and proper time and space intensification not only increase the production but also reduces the environmental hazards.
- 7. New technology to overcome the effect of moisture stress under dry land condition is explored by agronomy and future agriculture depends on dry land agriculture.

- 8. Packages of practices to explore full potential of new varieties of crops are the most important aspects in crop production which could be made possible only by agronomy science.
- 9. Keeping farm implements in good shape and utilizing efficient manner to nullify the present day labour crisis is further broadening the scope of agronomy.
- 10. Maintaining the ecological balance through efficient management of crops, livestock and their feedings in a rational manner is only possible by knowing agronomic principles.