# **Community Services**

The faculty serves the community through various ways and methods, which can be summarized as follows:

- 1. Providing agricultural services and consultations to individuals and relevant entities in different specialized fields that enhance food security and improve livelihoods.
- 2. Organizing scientific conferences, extension seminars, training and refresher courses for specialists and others in various specialized fields covered by the faculty.
- 3. Conducting scientific studies and research that benefit the environment and society, addressing different problems, and improving and developing agricultural production across its sectors.

#### **Community Services Provided at the Department Level**

#### 1. Department of Soil, Water, and Environment

Community services provided by the department include the following:

- Conducting environmental impact assessments of various agricultural projects.
- Conducting analyses for organizations, institutions, and individuals.
- Conducting analyses of chemical fertilizers to ensure their compliance with the established specifications and standards.
- Conducting chemical, physical, and biological analyses of soil to identify potential problems and proposing effective solutions to enhance its productivity.
- Conducting analyses of water samples from various sources, including surface water, groundwater, rainwater, and various wastewater streams such as greywater, sewage, agricultural, livestock, and industrial wastewater.
- Providing advice to stakeholders in the labor market on effective strategies to address problems arising from the use of analyzed water, rigorously assessing its quality and type, and determining its suitability for irrigation and drinking purposes.
- Conducting analyses of plants to diagnose and address problems related to their growth and productivity.

# **Community Services**

#### 2. Department of Agricultural Engineering and Modern Technologies

Community services provided by the department include the following:

- 1-Conducting training courses in the fields of:
  - Design and implementation of modern irrigation systems
  - Landscape (design and landscaping of gardens)
  - Various environmental control systems in agricultural facilities
  - Renewable energy systems
  - Recycling of animal and agricultural production waste
  - Design and implementation of greenhouses
- 2- Providing engineering consultations in the fields of:
  - Agricultural power and machinery engineering
  - Irrigation and agricultural drainage engineering
  - Renewable energy engineering
  - Agricultural buildings, facilities, and environmental control engineering
  - Manufacturing and post-harvest technology

### 3. <u>Department of Crop Science and Genetic Improvement:</u>

Community services provided by the department include the following:

- 1) Genetic analysis (DNA testing)
- 2) Analysis and evaluation of feed materials
- 3) Providing consultancy services in various fields, including:
  - Crop breeding and production
  - Conservation and maintenance of genetic resources and genetic improvement
  - Pastures and vegetation cover
  - Feeds and feed materials
  - Seed multiplication and testing
  - Environment and sustainable agricultural development
  - Coffee quality analysis

### 4. Department of Agricultural Economics

The role of the Department of Agricultural Economics (Agricultural Economics and Cooperation Program and Agricultural Extension and Rural Development Program) in serving the community can be summarized as follows:

# **Community Services**

- Studying the economic aspects of the agricultural sector and the issues related to the production and marketing of plant and animal agricultural products.
- o Providing the market with graduates who have skills and competencies capable of managing agricultural projects, analyzing their problems, and providing solutions for the benefit of the community.
- It provides consultancy and services related to agricultural commodities and contributes to the formulation of economic policies for the community in the agricultural field.
- o It develops and conserves the environment by providing consultancy and training in specialized fields to institutions operating in its environment to develop their capabilities and those of their employees.
- o It encourages research and studies that contribute to serving the environment surrounding the community in general and the rural environment in particular.
- o It conducts technical, financial, and economic feasibility studies for agricultural projects of various types.
- o It conducts or participates in research and studies that contribute to solving food-related problems in society.
- o It conducts courses in statistical and economic analysis.
- o It organizes workshops that address the urgent economic issues of the community.
- o It acts as a link between specialized agricultural centers and the rural community to solve the obstacles facing the agricultural community or transfer agricultural problems to scientific research centers for resolution.

### 5. <u>Department of Horticulture Science and its Techniques:</u>

Community services provided by the department include the following:

- 1. Providing the community and the labor market with graduates with skills and competencies capable of addressing agricultural sector problems and developing them for the benefit of society.
- 2. Conducting seed inspection and testing for different types of horticultural crops.
- 3. Examining samples of medicinal and aromatic plants.
- 4. Conducting scientific studies and research related to addressing issues in the horticultural sector, developing it, improving production, and meeting the needs of the market and society.
- 5. Providing technical supervision for fruit, vegetable, medicinal, and aromatic plant farms.

# **Community Services**

- 6. Providing consultancy, holding seminars, and training in various areas, including:
  - Establishing fruit, vegetable, medicinal, and aromatic plant farms.
  - Establishing and managing nurseries and greenhouses.
  - Designing, landscaping, and maintaining gardens over the long term.
  - Establishing tissue culture and biotechnology laboratories.
  - Hydroponics and urban organic farming.

#### **6.** Department of Animal Resources

Community services provided by the department include the following:

- Performing technical and economic feasibility studies for various animal production farms.
- Conducting specialized training courses and workshops that serve the animal production sector and its workforce.
- Offering technical supervision for animal and poultry production farms
- Conducting laboratory analyses of concentrated feeds.
- Providing a comprehensive range of veterinary services to ruminants and poultry.
- Supplying university staff with animal products (meat, eggs, milk) at affordable prices.

### 7. Department of Plant Protection

Community services provided by the department include the following:

- Organizing training courses and workshops in the fields of beekeeping, pest control, and plant diseases.
- Conducting examinations to identify the causes of plant diseases and pests and effective control methods.
- Providing consultations in the field of plant protection to relevant entities in the country and private agricultural sectors.
- Conducting research funded by both the public and private sectors to develop innovative solutions to address challenges related to plant diseases, pests, and their effective control.

### 8. Department of Food Science and Nutrition

Community services provided by the department include the following:

# **Community Services**

- 1- Providing the community with qualified and trained graduates to work in the field of food processing and quality assessment in factories, customs outlets, and human nutrition programs.
- 2- Transferring new ideas, research findings, and technology to application in the fields of industry and investment.
- 3- Conducting technical and economic feasibility studies for food and dairy industry projects.
- 4- Providing consultancy services to food inspection and control authorities and reviewing standard specifications for food products.
- 5- Conducting quality control and inspection tests for raw materials and imported and local food products.
- 6- Conducting scientific research to enhance and improve food processing operations, develop new food products, and conduct research related to solving problems facing the food processing sector and human nutrition programs.
- 7- Developing specialized training programs for professionals in the food and nutrition field to enhance their knowledge and specialized skills.
- 8- Participating in the development of rural food industries and rural women's development projects.
- 9- Training graduates and low-income individuals on establishing small productive projects for food and dairy product manufacturing to improve income levels and combat unemployment and poverty.
- 10- Providing general knowledge about food through workshops, seminars, and conferences.