# Second: Agricultural projects

### 1. Greenhouses

The greenhouse created within Al-hydroponic system (hydroponics) with 5000 m<sup>2</sup>. It consists of two halls, the first hall for the closed and the other for the open system. It includes the most advanced systems in hydroponics, cooling and refrigeration Haze, automatic control of irrigation and fertilization and monitor the concentrations of aqueous solutions. The introduction of these technologies within the methods that consume nearly 25% of water and fertilizer of the total consumption in the traditional systems. A maintenance of the existing greenhouses were made of the number of four halls for the cultivation of ornamental plants and flowers and scientific research represents the total area in the range of 10,000 m 2. Three of them were completed and work is underway to end the fourth hall.

### 2. Unit mechanized agriculture - seeder:

It has been the introduction of mechanized farming Flowers systems by planting pneumatic systems in special containers. It has been supplying an agriculture machine type Javo roto - fill the Dutch specialized in the cultivation and Coordination of parks and roads. It contributed to increase the seasonal production and individualization 10,000 seed per hour.

## 3. Pivot irrigation system:

It has been running pivot irrigation system, which aims to green fodder cultivation and supply of livestock department and camels center research with green fodder. It has a total area of 18 hectares distributed as follows: 6 hectares for the cultivation of Rhodes grass crop, 6 hectares for the cultivation of the crop alfalfa and 6 hectares seasonal cultivation of barley grains. It have been using the rotation system in agriculture and recycling spaces and during operation of the project has been supplying wed feed machine and feed Talpin has been used and activated , in order to benefit in feed production, training students on equipment and agricultural machinery.

### 4. Irrigation systems for fields and windbreaks:

Maintenance and establishment of many irrigation networks of palm fields, windbreaks, beauty facilities and roads. As well as supplying the university requirements for the maintenance of existing irrigation networks material.

#### 5. Unit of organic fertilizer manufacturing:

The introduction of a unit for the manufacture of organic fertilizers, which will aim to recycle agricultural and vegetable waste resulting from the fields and windbreaks and the resulting animal of outputs from the pens of cattle, sheep, poultry, and camels, the manufacture of these wastes into organic fertilizer used in the agricultural fields. In this regard, special equipment for manufactures fertilizers has been supplying, as follows:

- 1. Chop agricultural waste machine (trees and field crops, timber, etc.)
- 2. Mix the compost machine
- 3. Sift machine and filter impurities from the compost.

As well as, a building has been created to save the equipment and the development of the unit in the future has been the completion of this project and try it 100%.