

# **Unit A: Understanding Horticulture**

**Lesson 2: Determining the Importance of the Horticulture Industry**

# Terms

- Floral production
- Floriculture
- Landscape horticulture
- Olericulture
- Pomology

# Describe the popularity of horticulture.

- Horticulture is popular and important in all societies, both rich and poor.
  - The popularity of horticulture has had many advantages. An increase in jobs, increase in food for humans and animals, and an increase in aesthetic pleasure are just some of the advantages.

- Afghanistan's environmental conditions are highly favorable for many tree crops, vegetable species and seed production.
  - There are a large number of endemic horticultural species while the wide range of agro-ecological zones provides a long season of consistent supply.
  - Afghanistan is a unique center of genetic diversity and of great value to the international horticulture community.

- Carrot, radish, cherry, plum, apricot, peach, pear, apple, walnut, pistachio, fig, grape, pomegranate, melon, almond, are among the species present across the country and likely provide a unique array of useful agro-botanical traits.
- Horticultural crops are relatively water-efficient, contribute to significant production diversification and are a source of much needed nutrients for the population.
- Horticulture is land and labor intensive which is an advantage for poor farmers and sharecroppers. Cottage industry processing of horticultural products generates income for women and families.

- Horticulture crops are in a strong position to support food security and the rehabilitation of Afghan rural economy because:
  - Most Afghan farmers are already familiar with horticulture crops and are very receptive to innovative extension messages when their immediate interests are obvious.

- Horticulture crops represent a wide range of species that can be grown in the diverse agro-ecological zones inside the country over an extended period during the year that can be extended further if crops are grown under protected cultivation, e.g. plastic tunnels.
- Horticulture crop production is land and labor intensive, which creates employment.

- Horticulture crop cultivation is a high income generating activity; this is an advantage for poor farmers and sharecroppers looking to generate income.
- Horticulture crops are relatively water-efficient (income per unit water consumed), which is an advantage in Afghanistan where water is a limited resource.

- Horticulture crops include a wide range of short cycle crops (vegetables) and perennial crops (fruits and nuts), the combination of which (e.g. through intercropping and mixed farming systems) makes a horticulture-based farming systems economically diverse, nutritionally balanced, and environmentally sustainable.
- Peri-urban horticulture crop production contributes to creating job opportunities for urban and peri-urban populations while contributing to alleviation of poverty and malnutrition in urban areas.

- Cottage industries that provide packaging and processing of horticulture products diversifies income generation and is amenable to disadvantaged groups (i.e., women, disabled) and provides additional income security for families.
- There is a high demand for a wide range of horticultural products on regional export markets.

- Considering the regional reputation for high-quality produce and the expanding global opportunities, horticulture can once again become a source for export earnings.

# Importance of the ornamental horticulture industry.

- The ornamental horticulture industry is made up of two important segments.
  - One is ***floriculture***, the culture of flowers. Floriculture is an international, multibillion dollar industry. Floriculture includes the production, distribution, and processing of flowering and foliage plants.

- **Floral production** is the growing of flowering or foliage crops to maturity. Once mature they are sold. Mature plants can be sold as cut flowers or foliage, potted flowering plants, foliage plants, or bedding plants



- The other segment is ***landscape horticulture***, producing and using plants to beautify the environment.
- Some common ornamental plants that are sold in Afghanistan include Petunias, Hoary stock, Mexican asters, Roses, Iris, and Daffodil.



Petunias



Hoary stock



Mexican asters



Roses



Iris



Daffodil

- There is money that can be made selling ornamental crops. The following examples are of people in Kabul managing their own horticultural operation.

- Owner is living in Kabul and selling plants from his own greenhouse (20 x 8m). Besides the potted flowers, he provides seeds, ornamental bushes, tree samples and vegetables. If the demand increases, he purchases the extra products from other farmers. The potted flowers are sold for 50 – 3,000 AFA per piece. His annual net profit was about 120,000 AFA.



- Owner is living in Kabul and selling plants from his own 3 greenhouses (10 x 6m; 6 x 3m and 5 x 2m). Besides the potted flowers, he provides seeds and ornamental bushes. If the demand increases, he purchases the extra products from other farmers. The potted flowers are sold for 20 – 3,000 AFA per piece. His annual net profit was about 150,000 AFA.



- Owner is living in Kabul and selling just the cut flowers in his shop. He is purchasing them from the greenhouses in Kabul and in the surrounding areas. He is importing the cut flowers from Pakistan during winter. They also sell the artificial flowers. The cut flowers are sold 3 – 30 AFA per piece. His annual net profit varied from 100,000 AFA to 200,000 AFA.



- Owner is living in Kabul and selling plants from his own 2 greenhouses (20 x 10m). Besides the potted flowers, he is producing ornamental bushes and coniferous trees. His annual net profit varied from 200,000 to 300,000 AFA.



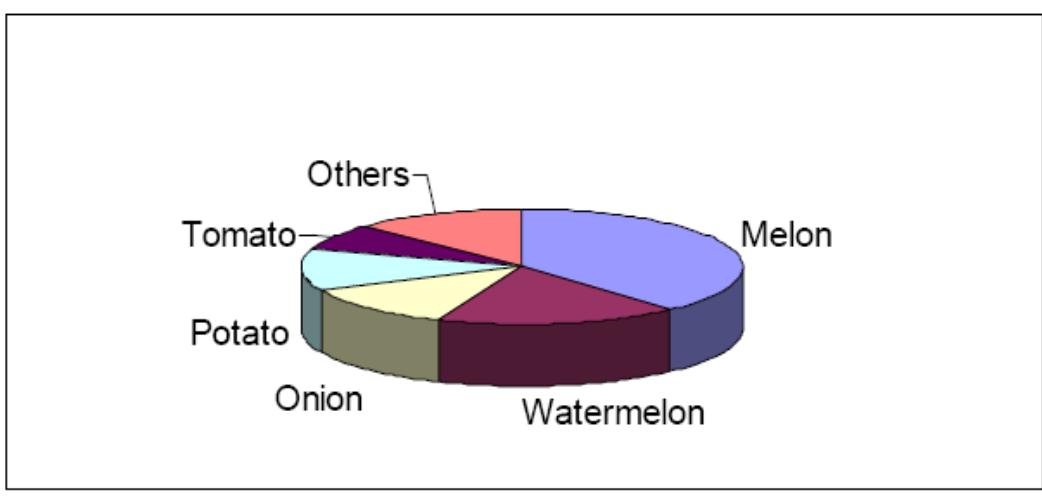
# Importance of the olericulture industry.

- *Olericulture* is the area of horticulture that involves the production of vegetable food crops. Vegetables are not only important to our daily nutrition, they are also important to the economy.

- Vegetables are important protective food and highly beneficial for the maintenance of health and prevention of disease. They contain valuable food ingredients which can be successfully utilized to build up and repair the body.
  - Vegetables play a significant role in human nutrition, especially as sources of vitamins (C, A, B6, thiamine, niacin, E), minerals, and dietary fiber.

- Vegetables - potatoes, tomatoes, okra, eggplants, onions and carrots - are usually grown for domestic consumption inside rural and peri-urban compounds. There is some commercial production in Farah, Ghazni, Kabul and Nangarhar provinces, and farmers usually maintain seed stocks for the following season.

- The major vegetable crops in Afghanistan include melon, watermelon, onion, potato and tomato, with these five species representing 87.4 % of the total area under vegetable cultivation:



# The most common vegetables grown in the provinces



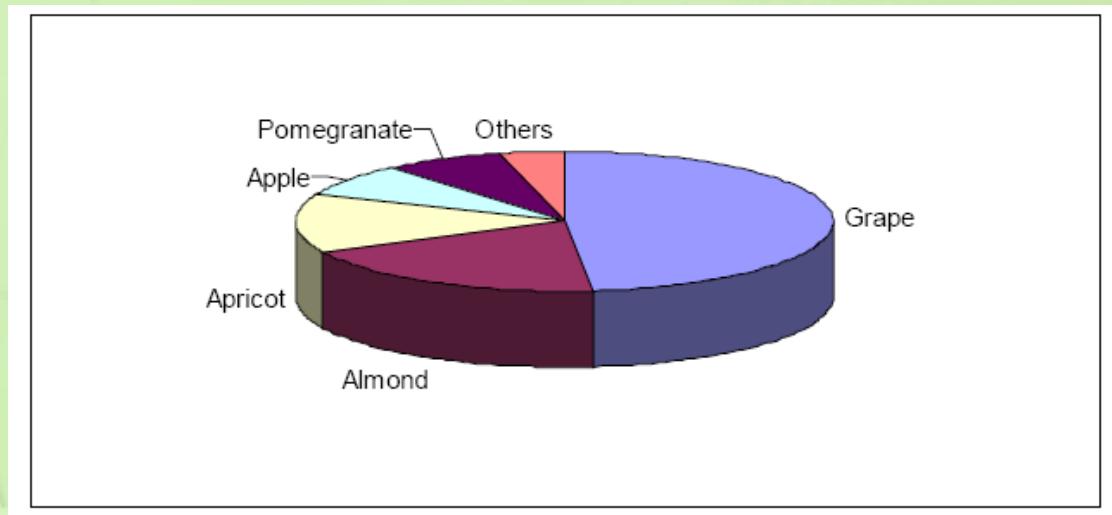
# Importance of the pomology industry

- **Pomology** is the area of horticulture that involves the production of fruit and nut crops.
- A. Fruit and nuts play an important role in our lives. Not only do they improve our nutrition and food security status, but they are also ideal products for industrialization, processing and marketing. The high value that fruits and nuts represent gives opportunity for the afghan farmer to generate income if given access to local and export markets

- Despite the enormous potential of Afghanistan for tree fruit production, under the current circumstances not very many of the orchards are currently of significant economic importance for farmers. The few surviving commercial orchards are poorly managed, productivity in general is low and—with a few exceptions—they generate little income (e.g. US\$200/jerib/year).

- However if managed properly income could increase significantly. An example of this would be a orchard that is located in Khas Kunar. The farmer there had been trained to prune, fertilize, and attack the fungal diseases and pests. It was reported that the owner had sold the production from his 3-jerib farm in bulk with a gross revenue of AFA 225,000 depicting the potential for the establishment of fruit orchards.

- The major fruit crops and vines include: grapes, almond, apricots, pomegranate and apples trees, covering a total of 95.9% of all orchards/vineyards:



# The most common fruits and nuts grown in the provinces



# Average gross income of horticultural and other agricultural crops as compared to wheat as base=100

