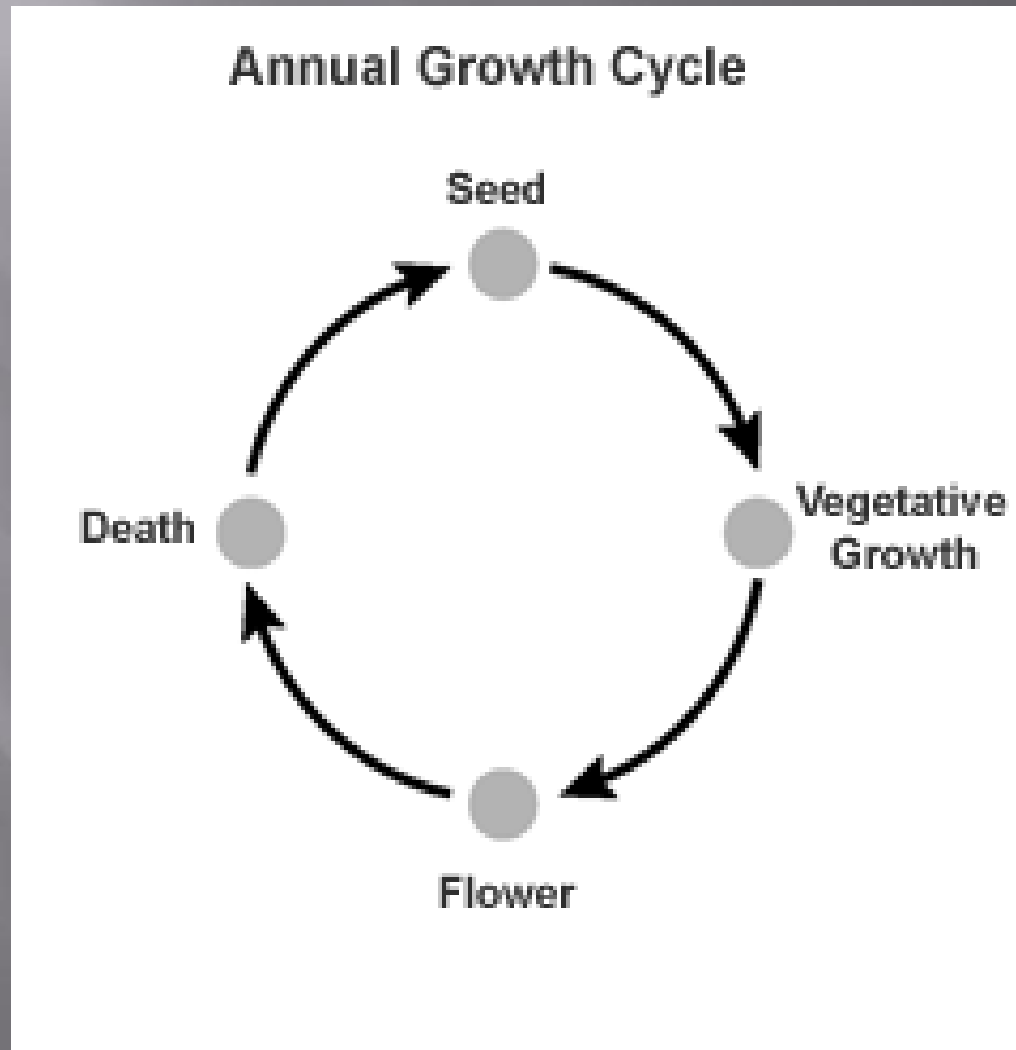


HORTICULTURAL PLANT CLASSIFICATION



Annual Growth Cycle



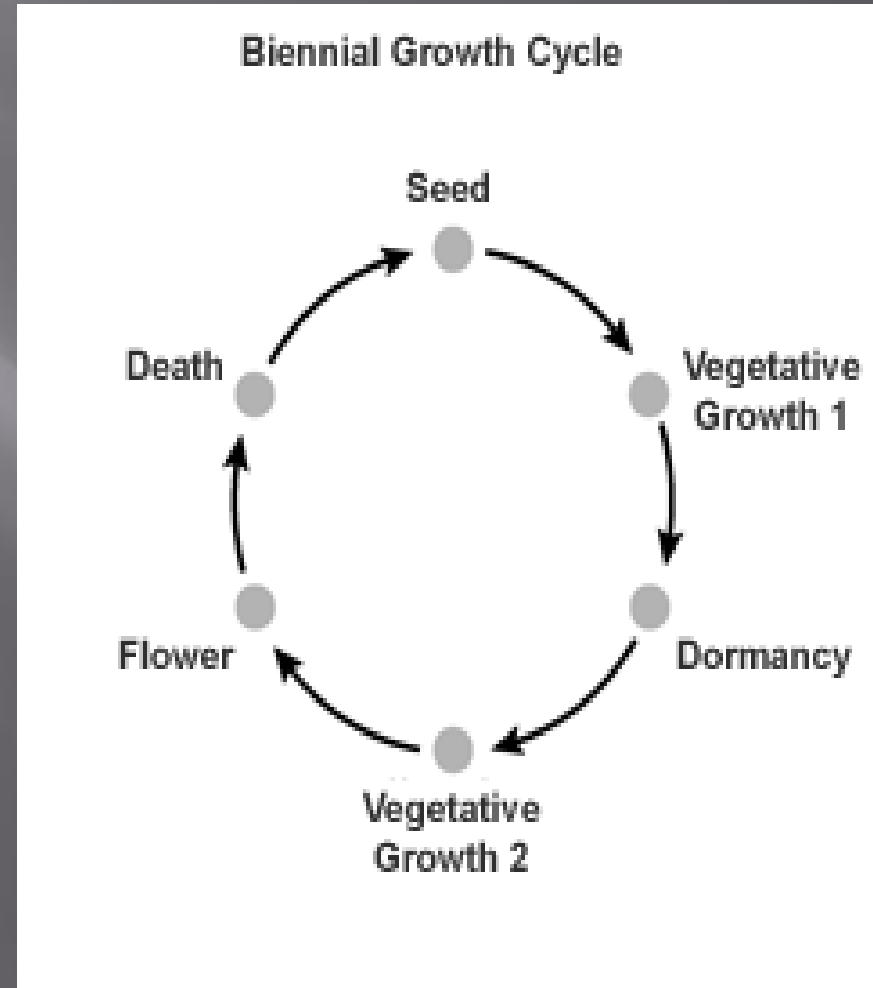
- ▣ Annuals – complete their life cycle in one season.

Examples: Marigold, Petunias, and many more!



Biennial Growth Cycle

- Sometimes biennials go from seed germination to seed production in only one growing season.
- This situation occurs when extreme environmental conditions (e.g. drought or temperature variation)
 - A plant will pass rapidly through the equivalent of two growing seasons.
 - This phenomenon is referred to as bolting.
 - Sometimes bolting occurs when biennial plant starts are exposed to a cold spell before being planted in the garden.



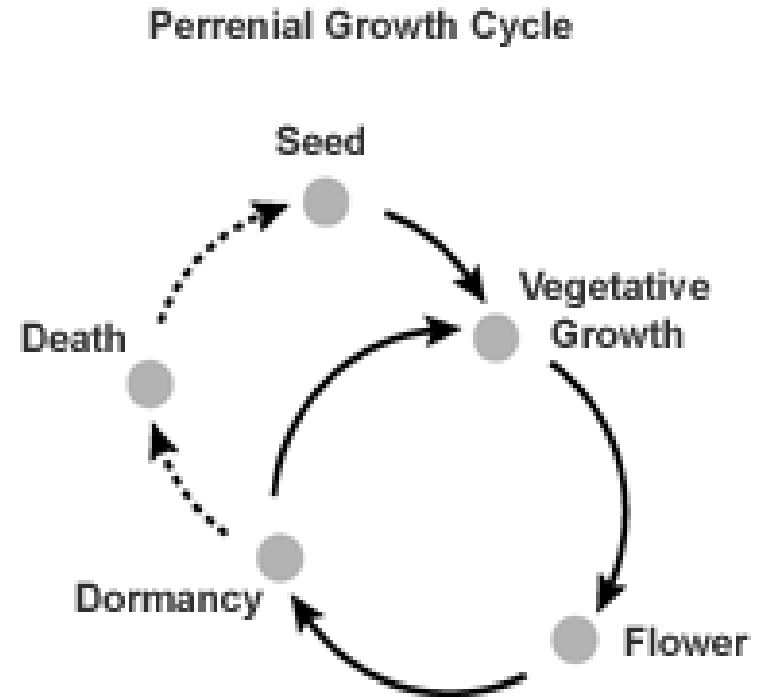
Biennials -complete their life cycle in two seasons. (first season vegetative growth, second season reproduce)

- ▣ Examples: Holly Hocks, Fox Glove



Perennial Life Cycle

- In a perennial life cycle, seed production can occur every year or every other year.
- Pruning may be necessary in some perennials (particularly fruit trees and berries) in order to have annual production.



Perennials

▣ Plants that grow year after year.

Examples: Roses, Shasta Daisy





Hardy plants can tolerate frost and some actually grow best in cool weather, like sweet peas. Hardy annuals usually have a shorter growing season and can be direct seeded outdoors early in the spring and will flower fairly rapidly from seed.



Tender plants are plants that cannot tolerate frost at all. These tropical or heat loving plants do not grow well in cool temperatures and require a long growing season, so they are started indoors well ahead of the last frost date. *Begonia* Semperflorens-Cultorum Hybrids, wax or fibrous begonias are tender annuals.

Cool vs Warm Season Crops

- Peas
- Onions
- Lettuce
- Cabbage
- Broccoli
- Potatoes
- Beets
- Carrots

- Tomatoes
- Peppers
- Beans
- Sweetcorn
- Melons
- Cucumbers
- Pumpkins
- Eggplant

Cool Season Vegetables

Very Hardy

- ▣ Peas
- ▣ Onions
- ▣ Cabbage
- ▣ Broccoli
- ▣ Radish
- ▣ Spinach
- ▣ Romaine Lettuce

Hardy or Half-Hardy

- ▣ Cauliflower
- ▣ Beets
- ▣ Carrots
- ▣ Potato
- ▣ Lettuce

All grow best in cool weather. Very hardy will withstand severe freezes and germinate/establish roots under lower temperatures

Woody plants



Trees



How about some shrub to go with that mulch

Shrub



Lianas

Herbaceous plants



herb



vine

Fruits

- ▣ Temperate fruits
- ▣ Tropical and Subtropical fruits



The current agriculture potentiality contributes about 26.5% of GDP and it provides employment about 70% of total labour force. Tanzania grows a range of fruit including tropical and **temperate**. The annual production of fruits is 678,515MT (this is 5% of potential area exploited).

Agro processing and especially small –scale processing is becoming very important in the country as means to reduce crop losses and value addition at production and collection sites and a way of income generating activity. However, the sector experience losses during and after harvest. Post harvest losses of fruits and vegetables are estimated at 50 to 80%. These losses are more meaningful economically compared to the cost of compensating for losses through increased crop production. Losses are caused by among another factors, mechanical, physical and biochemical aspects.

1.1.1 Need to be filled

The company will process fruits for juice which will be consumed by low and higher income earners who are not able to buy exported fresh fruit juice.

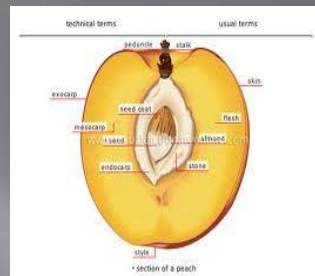
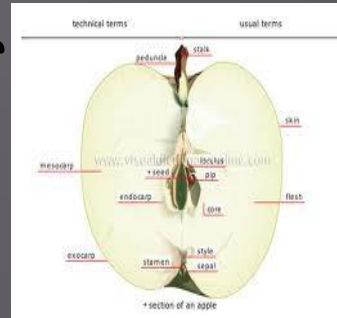
1.1.2 Description of the business

Temperate fruits



□ Pome fruits

میوه ای که در بخش مرکزی آن چند برچه متصل به هم وجود دارد و دارای تعدادی بذر هستند



□ Stone fruits

میوه ای گوشتی، ساده و ناشکرفا با درون بر سخت



□ Multiple fruits

میوه ای که از چند گل جدا از هم بر روی یک گل آذین متراکم به وجود می آید



□ Nuts

میوه ای خشک و ناشکرفا که به طور معمول تک بذر است و فرابر چوبی دارد



□ Small fruits

میوه هایی که به صورت بوته یا درختچه بوده و اغلب دارای میوه های ریز هستند

Tropical and Subtropical fruits

- Evergreen trees



- Deciduous trees



- Herbs



Ornamentals

- ▣ **Woody plants**

Trees (ever green and deciduous)

Shrubs (ever green and deciduous)



- ▣ **Herbaceous**

- ▣ **Perennials**

- ▣ **Biennials**

- ▣ **Annuals**

▣ Perennials



▣ Biennials



▣ Annuals



Vegetables

- ▣ Root crops
- ▣ Bulb crops
- ▣ Tuber crops
- ▣ Vine crops
- ▣ Cole crops
- ▣ Greens
- ▣ Salad crops
- ▣ Solanaceous crops
- ▣ Legumes
- ▣ Herbs
- ▣ Miscellaneous



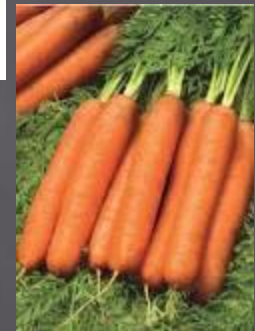
- ▣ Liliaceae
- ▣ Chenopodiaceae
- ▣ Umbeliferae
- ▣ Asteraceae
- ▣ Polygonaceae
- ▣ Brassicaceae



- ▣ Asteraceae
- ▣ Polygonaceae
- ▣ Brassicaceae



- ▣ Amaryllidaceae
- ▣ Chenopodiaceae
- ▣ Brassicaceae
- ▣ Convolvulaceae
- ▣ Umbeliferae
- ▣ Asteraceae
- ▣ Solanaceae



Cool Season Vegetables

These vegetables prefer cool growing temperatures (60°F to 80°F) and lose quality in hot weather. They are often replanted mid-summer for fall harvest.

Hardy Vegetable

Crops: broccoli, cabbage, kohlrabi, onions, lettuce, peas, radish, spinach, turnips

Temperatures: Hardy vegetables grow with daytime temperatures as low as 40°F and may survive a frosty nip.

When to plant:

- Based on soil temperatures, refer to Table 1.
- Plant as soon as soil adequately dries in the spring.
- These crops may be planted as early as 2-4 weeks before the date of the average last spring frost.

Semi-Hardy Vegetables

Crops: beets, carrots, cauliflower, parsley, parsnips, potatoes, and Swiss chard

Temperatures: Semi-hardy vegetables grow with minimum daytime temperatures of 40°F to 50°F, but are less tolerant of a frosty night.

Warm Season Vegetables

Warm season vegetables prefer summer-like weather with temperatures between 70°F and 95°F. They are intolerant of frost and may be sensitive to cool spring winds.

Tender Vegetables

Crops: beans, celery, corn, cucumbers, New Zealand spinach, summer squash

Temperatures: Tender vegetables grow with a daytime temperature above 55°F, and are intolerant of frost.

When to plant:

- Based on soil temperature, refer to Table 1.
- Soil is adequately dry to work.
- These crops may be planted (from seed) around the date of the average last spring frost. Transplants of cucumbers and summer squash without frost protection should be delayed until frost potential is over.

Very Tender Vegetables

Crop: lima beans, cantaloupe, eggplant, pepper, pumpkin, winter squash and pumpkins, tomato, and watermelon

Temperatures: Very tender vegetables are not only intolerant of frost, but also cool spring winds. They need daytime temperatures above 60°F, and prefer temperatures of 70°F to 95°F. A week of daytime temperatures below 55°F, may stunt the crop.

▣ Beverage plants



▣ Latex plants



▣ Medicinal plants

▣ Spice plants

