SPROUTIQ

Importance of Planning (Pre – Preparation)

IMPORTANCE OF PLANNING (PRE – PREPARATION)

Description: Pre- planning is the most vital stage in the whole crop cycle as it determines the living conditions of the said crop.

- ✓ What crop to grow
- ✓ What soil to use
- ✓ What farm type

Learning Outcomes

- Outline the importance of planning as a vital agricultural practice
- Describe the step by step process of choosing the plant and its requirement

IMPORTANCE OF PLANNING (PRE – PREPARATION)

How do you start?

1. Identify the farm size area and total number of plants/polybags
   - The farm area can accommodate how many plants/polybags?

2. Identify the farm technology you want to incorporate (eg: Fertigation)→ following your allocated budget

3. Location
   - Availability of sunlight (6 hours)
   - Not covered by buildings/trees
   - Flat land is preferable
   - Avoid water logged area
   - Availability of electricity and water
4. Identify the source of water
   - Continuous supply
   - Tap water/ Rain water
   - Clear and Clean/ not contaminated
   - Cold and clean smell (High oxygen content)

WHAT FARM TYPE

- Farm type:

i) Conventional

- Traditional approach of agriculture which uses the chemical fertilizers,pesticides and heavy irrigation

ii) Fertigation

- Modern approach of agriculture which utilize injection of fertilizers and water-soluble products into an irrigation system

iii) Vertical farming

- Modern method of agriculture of growing crops in a vertically stacked layers

- Certain crops also grows best according to different farm types
- While most can grow using conventional method, the modern approach (fertigation and conventional) helps to enhance the crop yield better
- Example: Lettuce can grow optimally using vertical farming
- Identify the cost according to your allocated budget

WHAT CROP TO GROW?

- Chilli

- Eggplant

- Okra

WHAT SOIL TO USE?

- Different crops needs different kind of soil
- The Soil are made up of different composition of Sand, Silt and Clay
- Therefore there are many kinds of soil with different kind of characteristics
- The soil characteristics also affects the pH
- Different crops needs different value of pH for optimal growth

Examples:

Chilli

- Grows best in loam (equal proportion of sand,silt and clay) or silt loam soil (70% silt and clay, 20% sand)
- Soil pH of 5.5- 6.8

Eggplant

- A deep, fertile with high organic content and well-drained sandy loam or silt loam soils is ideal
- Soil pH of 6.5

Okra

- a well-drained and sandy loam soil is mostly preferred
- Soil pH 6.5 – 7.5 is preferred

CLIMATE REQUIREMENTS

- The climate represents the environmental parameters of the farm area
- The growth of the plant is also heavily dependent on climate
- Climate can either bring optimal growth conditions for the plant or cause detrimental effects such as diseases
- Example: Hot and humid conditions increase susceptibility of diseases to certain crops

Chilli

- Optimum day temperatures for chilli peppers growth range from 20 °C to 30 °C

Eggplant

- They grow best in regions where the daytime temperature is between 25 - 31°C and night time temperatures around 21 - 27 °C
- Eggplant is a sun loving plant and should be positioned in an area that receives full sunlight.

Okra

- Okra is a warm weather crop therefore it can be grown in both tropical and warm temperate latitude.

- The optimum temperature between 24°C to 34°C is preferred

ACTIVITY TIME!