

Soil Management



Factors to Consider in Soil Management

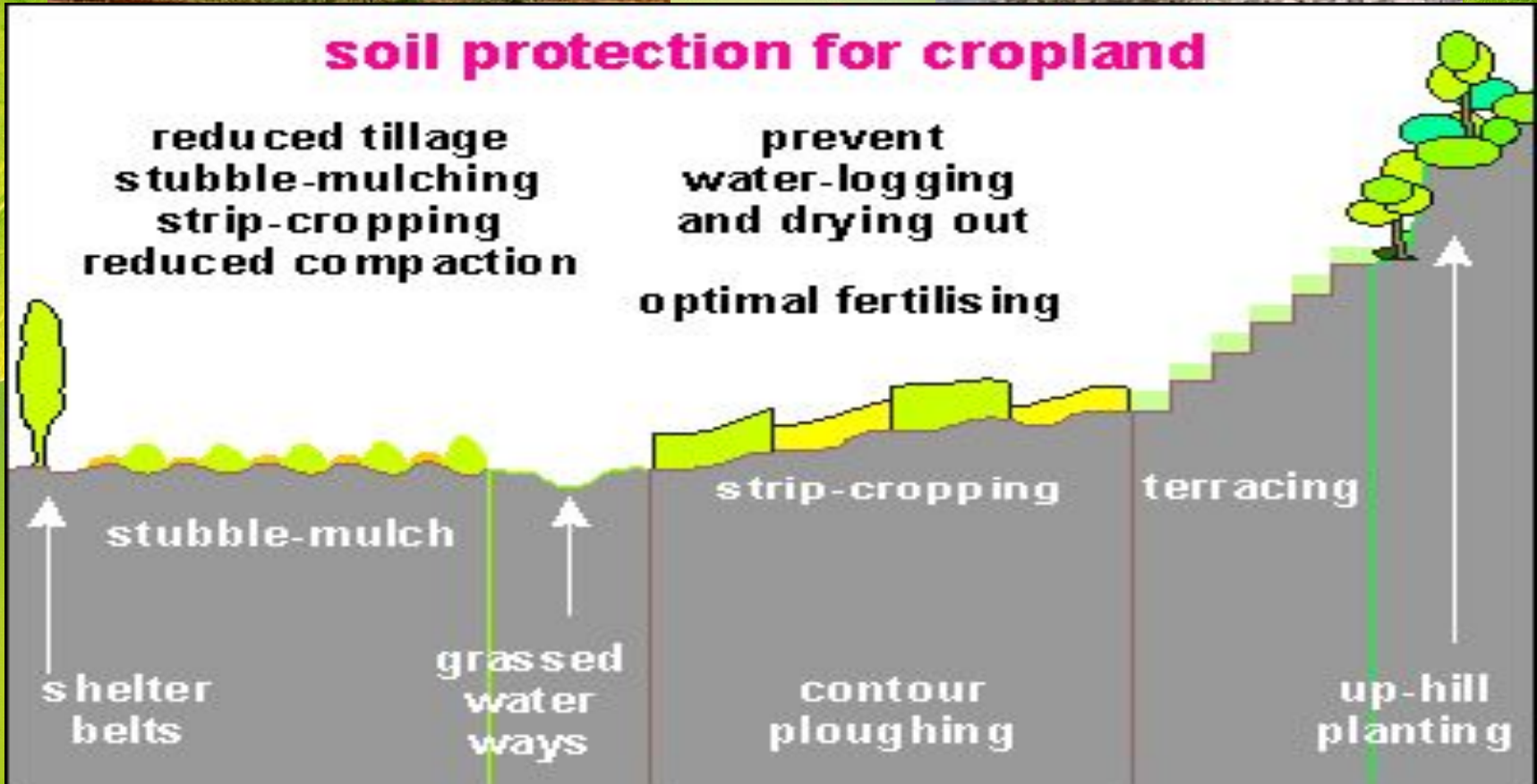


- **1. Cropping system**- pattern or arrangement of crops in time and space as well as the process of growing them. It conserves or improves the nutritional status of soil, adds organic soil structure, protects the land from erosion and ultimately gives high yield.

Protect the crop land



soil protection for cropland



- **1.1. Monocropping**- used in a large commercial production of crop.

Examples are:

- **Abaca**
- **Banana**
- **Pineapple**



- **1.2. Multiple cropping**- makes more efficient use of land area and sunlight, increase yield/unit area and control erosion in hilly lands, especially is accompanied by proper fertilization and irrigation

- **1.3. Succession cropping** – growing of 2 or more crops one after another.
- **1.4. Relay cropping**- planting a crop in the same piece of land as another crop is about to harvest.
- **1.5. Intercropping**- planting of different crops in alternate rows.
- **2. Fertilizer program**- A good fertilizer program strives to maintain or increase the current supply of nutrients to optimum levels and in correct proportions for economical production.

- **3. Erosion control**
- **Soil erosion**- physical loss & displacement of the fertile topsoil by primary action of water.
- **a) Cover cropping** – growing creeping and bushing plants w/ dense vegetative growth under horticultural trees like citrus, coconut, cacao, rubber and oil palm.
- **b) Contour farming**- planting across the slope following the contour lines rather than up and down.

- **c) Wattling-** a long, flexible and sprouting chain of branches laid horizontally on top of one another in an interlacing manner around pegs driven through shallow trenches into the ground.
- **d) Terracing-** a long slope is broken down into numerous short ones by forming series of banks.
- **e) Mulching-** covering bare soil w/ a layer of organic materials usually plants residues.
- **4. Soil acidity-** application of calcitic limestone (calcium carbonate) is necessary.