

CULTURAL WEED CONTROL

Definition

- Includes all aspects of good crop husbandry used to minimize weed interference with crops or any management practice that enhances the crops' ability to compete with weeds
- All these practices are basic to many crop production efforts
- Often done in an effort to provide a good environment for the crop

1. Hand weeding

- Oldest method of weed control and consists of
 - Hand pulling
 - Hand slashing
 - Hand hoeing







- **Collectively represent practices in which human energy is directly utilized**
- **This represents the most drudgery associated with subsistence farming in the tropics**
- **Requires over 50% of farmers time, leaving the farmer with very little time for, creative thinking or other activities**
- **Has limited agricultural productivity**
- **Organizational, logistic, supervisory problems associated with human labour make its use cumbersome**

2. Mechanical weeding

- Includes all practices where a mechanical device is used with animals or fossil fuels as the source of energy
- Both tractors and animals have been used in the tropics with varying degrees of success
- Purpose is to make humans more efficient users of power







3. Tillage

- **Crop land cultivated to**
 - **Provide good seed bed for seed germination and seedling growth**
 - **Weed control**
 - **Earthing up in long-season crops**



4. Burning

- Done before crop are planted except in sugarcane where fire is used partly to get rid of weeds, snakes and partly to prepare the cane for harvesting



- Primary purpose for other types of burning is to get rid of excessive vegetation



5. Flooding

- **Used in paddies partly to meet water requirements and partly to control weeds**
- **Can also be used to control perennial dry land weeds where the terrain can permit flooding**
- **Anaerobic conditions in flooded fields suffocate roots of terrestrial weeds and kill weed seeds**



6. Mulching

- Plant residues have been used for centuries to smother weeds and add OM to soil
- Inorganic materials such as plastics have been used for this purpose
- Mulching is useful in managing the fragile tropical soils



7. Crop rotations

- Crop rotations play a long-term role in weed control by preventing particular species from adapting to the growth cycle of specific crops
- The more varied the rotation, the better will be the weed control

