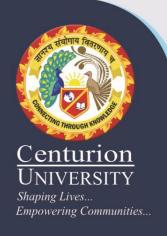
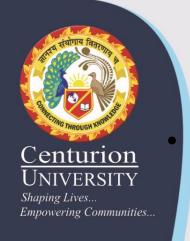


Session 5.2

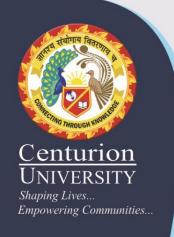


Proper Irrigation

- 1. Ensure appropriate water supply at various life stages of the crop as per each stage requirement
- 2. Ensure spread of water in the entire field
- 3. Ensure proper water drainage.
- 4. Adopt micro irrigation techniques (drip irrigation using appropriate equipments, sprinklers) based on the requirement of specific crops
- The major factors that determine the necessity of irrigation are the selection of crops and an appropriate cropping system. Obviously, not all crops (and not even all varieties of the same crop) require the same amount of water, and not all need water over the same period of time.



- Some crops are very resistant to drought while others are highly susceptible. Deep rooting crops can extract water from deeper layers of soil and hence they are less sensitive to temporary droughts.
- With the help of irrigation, many crops can nowadays be grown outside their typical agro-climatic region. This may cause not only the above mentioned negative impacts, but also some advantages.
- It may make it possible to cultivate land which would otherwise be unsuitable for agriculture without irrigation. Or the cultivation of sensitive crops can be shifted into areas with less pest or disease pressure There are irrigation systems of higher or lower efficiency and with more or less negative impact.



- If irrigation is necessary, organic farmers should carefully select a system, which is does not overexploit the water source, does not harm the soil and has no negative impact on plant health.
- One promising option are drip irrigation systems. From a central tank, water is distributed through thin perforated pipes directly to the single crop plants.
- There is a continuous but very light flow of water, thus allowing sufficient time to infiltrate in the root zone of the crops. In this way, a minimum of water is lost and the soil is not negatively affected.
- 5. Identify disease due to increase in moisture/water content and take measures to control them