

# **Traditional Methods of Irrigation. Crop Production & Management**

The high quantity and quality production of food is determined by the level and type of technology used during the production process.

As water helps in nutrient transportation in body of the plants for their growth, roots absorb water from soil and seeds also need water for germination. Plants act as shield against extremity of nature land frost or hot currents.

## **Irrigation methods**

First, as irrigation depends on soil type and irrigation frequency depend on season, sources of irrigation include ponds, wells, lakes, dams and rivers and is drawn from water bodies and carried to the field by help of man or animals.

As traditional irrigation methods include pulley system, chain pump, dhekli and rahat, for moat /pulley system, water is drawn using pulley and moved to various places of field by human labour however it may lead to uneven distribution of water. For chain pump, bucket is tied to a wheel which is pulled by chain and the wheel is turned for water to be collected in bucket. Bucket pours water out when it comes out and then water flows to field in man made canal like system.

Similarly, for dhekli system, it needs 2 people for load to be kept touched to log which is moved to lower canal like system to water field while for rahat system, 2 wheels are required with one attached to with bucket. It is placed half way inside water body and another on ground with rod attached to it horizontally. Moving rod in circular way rotates the 2 wheels in turn and wheel inside water body collects water into bucket

to the surface.

Finally, canal like system carry water to different parts of the field.