

Planting of Wheat on Beds: An Efficient Irrigation Technique

Do you have problems like?

- Low yield of wheat crop
- Poor crop quality due to weeds
- Shortage of irrigation water
- Poor/marginal quality groundwater
- Lodging of wheat crop

Why to use bed planting?

In Pakistan, farmers use highly inefficient conventional flood irrigation to irrigate their fields resulting in loss of precious water and nutrients. This increases the wheat input cost and reduces its economic viability besides loss of soils' productivity. Planting of wheat on beds/ridges can avoid the above problems.

Benefits of Wheat Bed Planting

- Improves crop yields up to 25%
- Saves irrigation water from 30-50%
- Less weeds and less lodging of the standing crop
- Easy crop harvesting both by manual and with machinery
- Ease on rainwater drainage
- Low negative effect of standing rainwater
- Saves up to 40% energy cost
- Good yields with less pumping of groundwater

How to Plant Wheat on Beds?

a) First method

- Prepare land through conventional ploughing and planking
- Broadcast recommended seed and basal dose of fertilizers
- Prepare beds or ridges with the help of a bed planter/ridger
- Apply irrigation to furrows up to 60-70% of the beds height (do not overtop the beds)

b) Second method

- Prepare land through conventional ploughing and planking
- Drill the seed and fertilizer with the help of a bed planter. The bed planter also develops beds at the same time.
- Apply irrigation up to 60-70% of the beds height (do not overtop the beds)



Conventional irrigation method resulting in loss of huge water



Broadcasting of seed and fertilizer



Making beds with Bed Shaper



Irrigation in furrow saves upto 50% water

Important Considerations

- Wheat should be planted from 1 to 15 November
- Appropriate wheat variety should be selected
- Healthy and treated seed should be used
- Land should be well prepared for bed planting
- LASER Leveled fields provide maximum benefits of water saving and crop yield
- Apply inputs (weedicide, fertilizers, water) on times to get maximum yield



Drilling of seed and fertilizer by a bed planter



Wheat on beds by broadcast method



Wheat on beds by drill method

Sugarcane Intercropping in Wheat

Additional benefits

- Increase in crop intensity
- Less fertilizer requirement
- Water saving for both crops
- Less cost of crop production
- Less weed infestation in sugarcane crop



Intercropping of sugarcane in the standing wheat crop

For more information contact:

Pakistan Council of Research in Water Resources (PCRWR), H-8/1, Islamabad. Ph: 051-9101275

e-mail: pcrwr@isb.comsats.net.pk website: www.pcrwr.gov.pk

**PCRWR Regional Office,
6.4 Km. Main Raiwind Road,
Lahore. Ph: 042-35320484**

**Drainage and Reclamation Institute of Pakistan,
DRIP Campus, Tando Qaiser Road,
Tandojam. Ph: 022-2765331**

**Water Resources Research Centre,
H. # 31-32, Sector E-8,
Main Double Road, Phase-VII,
Hayatabad, Peshawar. Ph: 091-9217807**