



DRIP IRRIGATION

High Yield from Low Agricultural Inputs

BENEFITS

- WATER SAVING BY 50%
- REDUCTION IN FERTILIZER USE UPTO 45%
- REDUCTION IN PRODUCTION COST UPTO 35%
- YIELD INCREASE UPTO 100%
- EARLY MATURITY OF CROP
- BETTER PRODUCE QUALITY
- CROP DIVERSIFICATION
- SUITABLE FOR UNEVEN TOPOGRAPHY



Muhammad Iqbal
Khudian Khas, Kasur



Majority of the farmers of Pakistan are poor and they struggle to get more per acre yield using less agricultural inputs in order to enhance their profitability. They adopt different techniques to make the agriculture cost effective. Many farmers are using modern irrigation technologies like drip irrigation to get maximum yield from minimum resources. One such effort has been made by a farmer “**Muhammad Iqbal**” of Khudian Khas, district Kasur.

He narrates his success story in these words.

“It was very difficult for me to afford agricultural inputs due to increase in the prices of fertilizers, electricity, weedicides, labor etc. I shared my problem with the employees of Water Management who recommended me to install drip irrigation being provided on subsidized cost with financial assistance of the World Bank”.

In the light of benefits explained to me, I decided to install drip irrigation initially on eight (8) acres.



Drip irrigation system has many advantages over conventional methods as it requires less agricultural inputs included water, fertilizer, pesticides etc. resulted in more benefits.

Eight irrigations are required to irrigate the potato crop from sowing to harvesting and per acre cost of one irrigation is about Rs. 400. So total cost of irrigation was about Rs. 3200 for potato crop. On the other hand, almost 38 irrigations are needed for potato crop from sowing to harvesting with drip irrigation and per acre cost of one irrigation is Rs. 25. As such total cost of irrigation for the whole crop is about Rs. 950. It means that cost saving on water only is more than 70%.

Muhammad Iqbal further states that there is 40 to 50% saving of fertilizer by drip irrigation. He explained that in conventional method of irrigation, he used to apply five (5) bags of Urea, three (3) bags of DAP and two (2) bags of Potash per acre. While, in drip irrigation two (2) bags of Urea, one (1) bag of DAP and one (1) bag of Potash per acre are enough for potato crop. As such, in total there is about 50 % saving in fertilizer.

He added that in conventional method of irrigation, it was very difficult for me to control the weeds as they grow in the whole



field where water is applied but in drip irrigation technology, water is applied only near the roots of the plants. So, the growth of the weeds is minimized and ultimately weedicides expenses are cut down to half.

According to agricultural experts, farmers can get 100% more yield by using modern irrigation technology of “drip irrigation”.

Besides other benefits, drip irrigation enabled me to save time and labor. By conventional method, twelve to eighteen hours time was required to irrigate eight acres of land but now it takes only two hours to irrigate the same area with drip irrigation. I also used to pay Rs. 500 per day to each labourer and two labourers were required for irrigation with conventional method. Now only one caretaker is enough to operate the whole drip irrigation system. So drip irrigation is very beneficial in terms of time and labor saving.

Muhammad Iqbal was getting two hundred maunds per acre potato yield with conventional irrigation method and now he harvested above three hundred maunds per acre.

Due to his successful experience, Muhammad Iqbal suggests to other potato growers to install drip irrigation through Water Management wing of Punjab Agriculture Department on 60:40 cost sharing basis for curtailing cost of production and enhancing the production of potato due to more number of tubers, uniform and bigger size of the produce.

