Punjab Irrigated-Agriculture Productivity Improvement Project



Drip Irrigation Helping to Promote Organic Agriculture in the Punjab

PIPIP Feature Story

In Pakistan, most of large farms are owned by absentee land lords and their land is managed by the illiterate and non-technical workers who have no feeling of ownership and technical capacity for better crop and water productivity. This leads to less production and low profit. On the other hand, small land holders, who manage the farms themselves have financial constraints for purchasing costly agricultural inputs to apply recommended doses. Consequently, they usually reduce crop inputs rate but are not able to reduce environmental impacts. Organic food growers cut production cost by eliminating inorganic fertilizers, pesticides, herbicides etc. Agricultural scientists consider that drip irrigation systems are well-matched to the needs of small organic farmers, being the best method to apply controlled organic agricultural inputs to the crops.

Mian M. Naeem is a progressive grower and producing high value organic food with drip irrigation for last four years. He is a small farmer owning only 6 acres of land (5 acres on drip irrigation). He shared his experience with OFWM team as "organic farming requires agricultural inputs such as water and organic fertilizers in small quantity and drip irrigation provides best solution to apply requisite amount of these inputs to the crops. I am cultivating different organic vegetables like Cucumber, Capsicum, Bitter Gourd, Tomato, Brinjal, Pumpkin etc. with drip irrigation. I store canal water in the pond and use it subsequently to irrigate the crops with drip irrigation system".



While responding to the question about organic fertilizer and pesticides, he told that "I use bacteria culture for decomposition of animal waste and apply it as fertilizer to the crops through drip irrigation. Leaves of different plants are used for preparing materials to be used as pesticides which are human and environment friendly. Contrary to organic food, conventional food may contain hazardous chemicals absorbed from inorganic fertilizers and pesticides that cause different diseases including cancer".

"Drip irrigation enabled me to enhance my per acre yield upto 50 percent besides reducing agricultural inputs upto 60 percent. But we are not getting huge economic returns due to low prices of output in the local market and increasing prices of agricultural inputs including seeds, Diesel etc., which ultimately reduces our profit margin".

He shared that "In Pakistan, the people are not health conscious and they are unable to differentiate between healthy organic food and conventional food due to which, we (organic food growers) are facing difficulties to find potential markets in small cities. The large metropolitans having millions of population like Lahore, Islamabad etc. are potential markets for organic foods and the good news is that a new road has been built under One Belt-One Road project of of China Pakistan Economic Corridor (CPEC), connecting my farm to these big markets".

In Punjab, most of the un-irrigated lands with their intact biological conditions can be better utilized for promoting organic enterprises. As a matter of fact, drip irrigation can facilitate a number of farmers who are ready not only to produce healthy organic foods for their personal use but also to sell it in the markets and earn more economic returns per acre.

