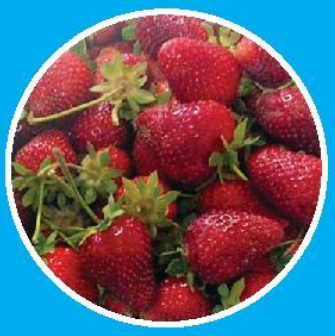
GOVERNMENT OF THE PUNJAB
Agriculture Department

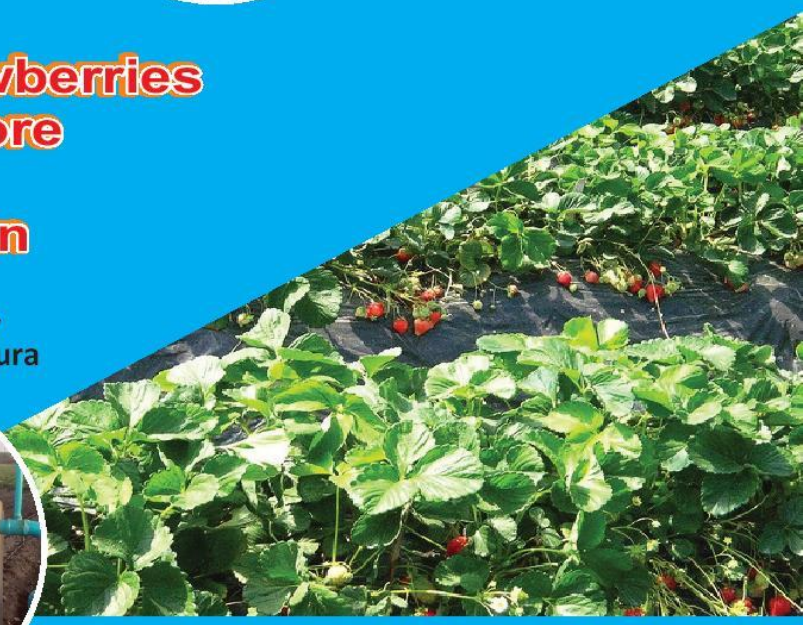
OFWM
PIPIP
PUNJAB IRRIGATED-AGRICULTURE
PRODUCTIVITY IMPROVEMENT PROJECT





Scrumptious Strawberries Rewarding More with Drip Irrigation

Chudhary Sajjad Hussain,
Muridke, District Sheikhupura

The farmers of wheat-rice dominant areas, customary of cultivating food grains crops since generations, would had never thought of cultivating Strawberry. Because it was considered as the fruit of the West with its extensive cultivation in the USA, Italy, Turkey and Mexico. The fruit has enormous dietetic value as potential source of protein, carbohydrates, fats and vitamins. The fruit is consumed in fresh form and its pulp is processed for making jam, syrup, squashes, jellies and other by products. In Pakistan, strawberry is mainly grown in specific areas of Khyber Pukhtoonkhwa (Swat, Charsadda, Mansehra, Haripur, Abbottabad and Mardan) and Punjab (Lahore, Sheikhupura, Gujranwala, Gujrat, Sialkot, Jhelum and Chakwal).

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

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Strawberry cultivation is gradually growing in Punjab as it was sown at 1,905 acres (770 ha), 2,330 acres (945 ha) and 2,500 acres (1,011 ha) during 2012-13, 2013-14 and 2014-15 respectively. Although it is still a new fruit and presently its cultivation and marketing, unlike traditional crops is not very popular, yet its cultivation is economically viable and financially profitable to a great extent.

Introduction of drip irrigation in Punjab's irrigated agriculture has provided an opportunity to the growers for cultivating different fruits including strawberry to reduce their production costs and enhance productivity. Punjab Irrigated-agriculture Productivity Improvement Project (PIPIP) is under implementation with the World Bank funding to support the highly vulnerable farming community for adoption of improved irrigation management cum productivity enhancement technologies like drip irrigation to increase farming incomes.

Amid many, Mr. Sajjad Hussain is one of the small farmers of district Sheikhupura, who has installed drip irrigation system and growing strawberry on five acres (2 hectares). Mr. Falak Sher, Farm Manager, while sharing his experience indicated that:

"***Traditional farming has become less profitable due to continuously increasing production costs (mainly on irrigation and fertilizer). I was anxious to shift on high value agriculture i.e. fruits and vegetables etc. from traditional crops and was in pursuit of such system that can help in saving of costly inputs, especially for strawberry cultivation. Meanwhile, the On-Farm Water Management (OFWM) staff approached me and explained that drip irrigation system enables the growers to get more crop with lesser input costs, which fascinated me a lot.***"

It is very difficult to convince farmers of wheat-rice dominant areas to adopt drip irrigation for growing high value crops owing to high initial investment. It is often considered that like strawberry fruit, drip irrigation is also a technology of the West having not made for Pakistani farmers. The introduction of drip technology on a larger scale under PIPIP has negated the concept of those agriculture fundamentalist.

Mr. Sher is happy with the system performance and shared that:

"The farm soil is clayey and it had been kept fellow because of drainage problems when irrigated traditionally. It's my first experience of cultivating strawberry under drip irrigation on these five acres (2 hectares) and I found that my per acre expenditure has considerably been reduced as compared to traditional irrigation practices. The reduction in fertilizer, pesticide and irrigation expenses have been found to the tune of 25, 35 and 33 percent respectively. Labor cost has also been reduced to about 20 percent. As such, overall cost of production has been reduced to the tune of 20 percent per acre."

Drip irrigation has widely been used in the world since 1960's, especially for fruits and vegetable production. Its promotion in this part of the globe, although a bit late, but is proving highly profitable technology for growing high value crops. One of the biggest advantages of this technology is affective "fertigation".

Mr. Falak Sher has rated his first experience of cultivating strawberry with drip irrigation as highly profitable business and stated that:

"An important aspect in strawberry cultivation is its frequent irrigation requirements to keep the beds oftenly at field capacity for attaining optimum growth and healthier fruiting. It is a costlier crop when grown with traditional irrigation. Drip irrigation is the best solution to ensure availability of adequate amount of water and nutrients in its root zone. Moreover, fruit mortality rate has significantly been reduced with drip technology as compared to bed & furrow irrigation."

Field data has revealed that drip irrigation created visible impact in terms of water saving, reduction in fertilizer use, crop productivity enhancement and facilitating crop diversification. It has emerged as multiple solution technology in the wake of dwindling water availability and climate change challenges arisen vehemently during last few years.

Falak Sher, summing up the benefits of cultivating strawberry with drip irrigation explained that:

"I have earned Rs. 225,000 per acre so far and also pretty sure that I shall earn gross income of Rs. 400,000 per acre. I have calculated that my income has been doubled as compared with the traditional farming, which couldn't be possible without drip irrigation. Punjab has large number of farmers having small land holding, I urge them to move to high-value crops like vegetables and fruits for not only enhancing their farm incomes substantially but also overall fruit exports of the country."