Success Story of
HEIS Ambassador Farmer Muhammad Asghar Tarar On Drip Irrigation System

Farmer Introduction

Muhammad Asghar Tarar is residence of Chak 12 S.B Kotmomin, Sargodha. He is also Principle of high School Kotmomin aside as farmer. He is owner of 6.4 acre of Citrus orchard (6 Years old). He took initiative of installing drip irrigation system on his farm because he has limited amount of canal water which came on weekly basis and only irrigate around 0.5 acres on each turn. His tube well water is not of good quality. So due to limited canal water and severe summer in Sargodha in order to overcome this shortage he mixes canal water with Tubewell water to irrigate his citrus orchard. His orchard was not in good health before drip system and he did not get much income from it. When he was planning on installing drip system on his orchard lots of people frightened him about its failure but he took courage and installed system. After using drip on his orchard for 2 years his citrus orchard became one of the best orchard in surrounding areas and he is very satisfied by its result and is now promoting drip in his village and surroundings.

Farm Particulars

- **Farm Location:** Chak # 12 N.B, Tehsil Kotmomin, District Sargodha
- **Irrigation Schedule:** Drip Irrigation System
- **Topography:** Plain

System Price

Total System Price (PKR)	**Rs. 911,531**
Farmer Share (PKR)	**Rs. 364,612**
Farmer Share per Acre (PKR)	**Rs. 56,970**

Salient Features of Drip Project

Subsidy Scheme	**PIPIP**
System Installation year	**2014-15**
Total area under system	**6.4**
HEI System Crop	**Citrus**
Soil Type:	**Clay**
Water Source	**Canal**
Power Source	**Diesel Engine**

Water Saving comparison

Irrigation Application by Conventional Flood System in 1 year crop tenure	**3567 m3**
Irrigation Application by Drip System in 1 year crop tenure	**385 m3**
Water Saving = 89%	

Diesel Consumption comparison

Diesel Consumption through flood in one year	**Rs = 4592**
Diesel consumption through Drip in one year	**Rs = 1246**
Diesel Saving Drip vs Non Drip = 73%	

Fertilizer Comparison

	Drip Irrigation				Flood Irrigation			
PARTICULARS	**Unit**	**Rate/Unit (acre)**	**QTY**	**AMOUNT (Rs.)**	**Unit**	**Rate/ Unit (acre)**	**QTY**	**AMOUNT (Rs.)**
Manures & Fertilizers	**NPK @ 57:38 :15 Kg/ acre**				**NPK @ 90 :40:6 Kg/ acre**			
Nitrogen	**Urea Bag (46-0-0)**	**1800**	**1.8**	**3,240**	**Urea Bag (46-0-0)**	**1800**	**2**	**3,600**
Phosphorus	**Soluphos (18-44-0)**	**3000**	**3.5**	**10,500**	**NP Bags (22-20-0)**	**2600**	**4**	**10,400**
Potassium	**WS SOP bags (0-0-50)**	**5500**	**1.2**	**6,600**	**SOP Bags (0-0-50)**	**4000**	**0.25**	**1,000**
Complex Fertilizer	**Zinc**				**Zinc**			
Mechanical Hoeing (Intercultural)	**Rs/acre**							**-**
SUB TOTAL				**20,340**				**15,000**
Fertilizer saving Drip vs Non Drip = - 36%								

Yield Comparison

	Drip Irrigation				Flood Irrigation			
PARTICULARS	**Unit**	**Rate/Unit (acre)**	**QTY**	**AMOUNT (Rs.)**	**Unit**	**Rate/ Unit (acre)**	**QTY**	**AMOUNT (Rs.)**
Yield	**Mounds/acre**	**750**	**125**	**93,750**	**Mounds/acre**	**750**	**50**	**37,500**
Yield Increase Drip vs Non Drip = 150%								

Benefits of Drip System

- Water saving (Now farmer only uses canal water for irrigating his orchard because through flood irrigation he was only able to irrigate ¼th of his area.
- Quality and shining of fruit is increased.
- Fertilizer efficiency improved
- Fruit shedding was decreased in summer.
- Increase in income due to underground lateral there is no problem in ploughing the field and dripper are in fixed position saving cost of aligning drip line as compared to open system.

Muhammad Asghar Tarar Farm Pictures

Fruit with desired size

Better Quality fruit

Healthy Crop with high production

Quality and shining of fruit is increased.