

## Drip Irrigation Fros or Against Marginal Farmers

**Nitika Thakur, Gagandeep kaur**

MSc. Scholar, UIAS, Chandigarh University, Gharuan, Mohali (Punjab).

Email-thakurnitika751996@gmail.com

**ARTICLE ID: 083**

### **Introduction**

In the early 1960s, Blass developed, this method and the new dripper became the first outdoor irrigation sender. During the 1960's and 1965's, he set up drip irrigation systems and sold them in Israel and abroad.

Irrigation is a water supply system that greatly benefits the growing and healthy plants. It provides a good amount of water for plants. Irrigation is a small irrigation system that has the potential to conserve water and nutrients when applied to plants. It is the farmer's decision to provide nutrients and fertilizer with irrigation water to the plants. Irrigation irrigation provides water especially in the root zone at a certain amount at the right time. In this way each plant gets what it needs and how much it needs. Also known as "Trickle Irrigation". Water works evenly in the area of the plant roots. Water is used near the root zone of the plant. Irrigation should be used for crops such as: - vegetables, tress and soft fruit plants etc. Irrigation irritates water flow, evaporation and erosion. The efficiency of irrigation irrigation provides good yields and crop yields. It is the best way for farmers to save water, fertilizer and energy.

### **How it works: -**

In drip irrigation water and mixed nutrients are delivered to the whole field through pipes called "Drip lines". Each drip lines emits a number of water droplets containing water or compound water containing nutrients and fertilizers leading to the same use of water and nutrients in the root zone in the plant sector.

### **It is of two kinds**

- ✚ The Surface Irrigation system uses adjacent emitter spaces (12"-18") and a small wall (8-10mil) drip line mounted 1" to 6" below the surface. It is a temporary system because drip line is restored and reused every year. Submissions can therefore be permanent or temporary. This system is widely used in high value plant.
- ✚ Sub-Irrigation Drip irrigation is a work in the 20"-27" emitter space with a thick wall (13-15mil) embedded 8"-14" under the surface. This system is permanent, making design and installation very important to ensure duration. Sub Surface irrigation is widely used in crop lines.

### **Benefits and Implications**

The loss of fertilizer and nutrients is minimal due to the small amount of water supply to the plants. There is no field measurement and the unusual structure of the building is easily incorporated into irrigation. Proper water management of plant roots retains the moisture and volume of the soil field. There are no staff costs for irrigation because only driplines are used. Weed growth and soil erosion are also limited to drip irrigation due to the limited water supply to the soil. In this way the forage stays dry and reduces the risk of disease by preventing their growth in its favorable conditions. Fertilizer also occurs in irrigated irrigation by mixing water with fertilizer or nutrients and reducing wastage of nutrients and nutrients. 100% water consumption because water is still distributed evenly in the local study and soil type. And it is an energy-saving method that works at low pressure.

Drip irrigation is expensive due to its initial initial cost. It can also lead to moisture distribution. Drip irrigation management is necessary and appropriate skills. It can also lead to the prevention of drip lines if the water is not properly filtered. The sun also makes drip lines irrigation and shortens the life span of drip lines. The dedicated NABARD-funded irrigation fund has initially approved some Rs 5000 crore (Rs 2000 crore for 2018-19 and Rs 3000 crore for 2019-20) to encourage public and private investment in Micro irrigation. The main objective of the fund is to facilitate the provinces in consolidating resources to increase coverage for Micro irrigation.

The subsidy for drip irrigation comes through the Government program under the Farmer Welfare Program. It is to stop the irrigation system too much. If you plan to launch a program in your area, you will need to go with a 50% and 70% Government Grant on subsidy.

### How to Get a Subsidy

- The farmer should have one hectare of land.
- The farmer must have a bore-well in the field.

### Irrigation Schemes: -

- **PMKSY** Pradhan Mantri Krishi Sinchai Yojna was launched in 2015-2016, to expand the rapid irrigation system. Under this grant 90% subsidy is provided to farmers. The aim of the scheme is to expand the area under the minimum irrigation technology to increase WUE (water efficiency), increase crop production and farmers' income through water management.
- **PMKSY Soil and Water Conservation** is being introduced in all regions of the Punjab. The aim of the program was to integrate water resources, distribution and efficient use of water efficiencies through appropriate technology and practices. It is linked to tube-well / river lift irrigation projects with modern irrigation technology for energy efficiency.
- **Punjab irrigation project (NABARD-RIDF-20)** applies to all Punjab regions. Its purpose is to make better use of the irrigation water available in the farmer's fields.

### Conclusion

The Drip Irrigation is a magnificent technique for farming. In this farming system we apply small amount of water to the plants or crops by which we can conserve the water, energy, fertilizers and nutrients. But its main concomitant is that it is not useful in all crops like cereals, woody crops. It is not beneficial for small / marginal farmers because of its more expenses, and it also needs proper technical knowledge to operate it properly. Most of the farmers are not aware about subsidy and Government Schemes for drip irrigation, so Government should provide vocational trainings to the farmers for the proper implementation of this Drip Irrigation process. So that, each and every farmer can take full benefits of these schemes or policies by which we can conserve our natural resources and improve production of the crops and yield.