

PROGRESSIVE FARMER IN VEGETABLE CULTIVATION

1. Background

Mr.R.Rajendran S/o Th.Ravuthar is a 55 years old farmer residing at Vairavankadu village, Thirupooni East, Keelaiyur block of Nagapattinam district. His qualification is SSLC. He is involved in the farming activity for the past 35 years. Earlier, his father adopted the traditional method of cultivating vegetables. He marketed the produce in the local market and earned a handsome profit to run the family without any savings. He owned around 2.5 acres of land for the cultivation. One small pond is available for irrigation purpose.

Mr.Rajendran involved in the farming activity for last 10 years. He wants to uplift the farming activities in his own land of 2.5 acres. He discussed with the scientists from KVK, Sikkal regarding the new technologies for cultivating vegetables and other crops regularly. Based on the idea received from KVK, Sikkal he started to cultivating the vegetables like brinjal, chillies, tomato, cluster beans, snake gourd, bitter gourd etc., and other crops like Ground nut and pulses.

2. Intervention Process

He approached the KVK, Sikkal for getting guidance for the intensive cultivation of vegetables. Moreover, he attended the useful training related to modern techniques for cultivating the vegetables like Pro-tray nursery, irrigation through Rain-gun and Drip irrigation Systems. He is involved in the demonstration of IIHR vegetable special in the field.

3. Intervention Technology

He started to cultivating the vegetables with new technologies since 2010 with the advice received from the KVK, Sikkal. He raised the seedlings like brinjal, chillies and tomato through pro-tray nursery. He transplanted the pro-tray nursery seedlings in his field. In the main field, he installed a drip irrigation unit for the transplanted vegetable crops. He adopted the following recent technologies in the vegetable cultivation:

- Use of high yielding varieties/hybrids,
- Seed treatment with *Trichoderma viride* (4 g/kg) and *Pseudomonas* (10 g/kg of seed)
- Drenching the seedlings with *Pseudomonas fluorescens* @ 10 g per litre of water
- Foliar spray of *Pseudomonas fluorescens* @ 2 ml/litre of water
- Spraying of IIHR vegetable special @ 0.5% (7.5kg/ha – three times spray at 20 days interval – starting at flowering stage)
- Application of Neem Seed Kernel Extract (NSKE) @ 0.5% or Imidacloprid @ 0.5ml/litre of water based on the need to control sucking pests
- Keeping of pheromone traps (12 Nos./ha) and Yellow sticky traps (12 Nos./ha) to control the insects in his field which are eco-friendly in nature.

4. Impact on Horizontal spread

Since, he is a progressive farmer in keelaiyur block of Nagapattinam district; Nagapattinam farmers can make a visit to his farm by the adoption of latest technologies for cultivating the vegetables. So far, nearly 20 farmers from nearby areas visited his field and gained knowledge from him.

5. Impact on Economic Gains

He earned Rs.2,41,250/- as a net return from one hectare of land by cultivating a brinjal in 6 months period by investing Rs.1,51,250/- during the year 2015. By adopting the above technology he earned 25% more yield than conventional method

Sl. No.	Particulars	Conventional method	IIHR Vegetable spray and precision farming
1.	Yield (q/ha)	156.25	196.25
2.	Cost of cultivation (Rs./ha)	109375	151250
3.	Average fruit weight (g)	90	120
4.	Number of fruits /plant	40	55
5.	Average market price (Rs./kg)	16	20
6.	Gross Return (Rs./ha)	250000	392500
7.	Net Return (Rs./ha)	140625	241250
8.	BC Ratio	1:2.29	1:2.60

Additionally, he purchased around 5.0 acres of agricultural land in the recent years by getting the income only from vegetable cultivation. At present, he is established the Pro-tray nursery unit, Rain-gun unit, Drip irrigation unit, Motor with pump set and other spraying accessories which are very much essential for the intensive cultivation of vegetables. Moreover, he is having one acre of mango orchard with preferred varieties like Rumani, Alphonso, Neelam, Bangalora and Imam Pasand.

6. Impact on Employment Generation

He generated regular employment for 3 persons. He also generated employment for minimum 10 persons during season at least for 30 days.

