

IIHR Vegetable Special – A real income booster of the vegetable growers in Thiruvannamalai district.

A. Situation analysis / problem statement

The area under vegetable crops in Tamil Nadu increased to 2.56 lakh ha as per census in 2017-18 with an annual production of 6304 million tonnes. Adoption of high yielding cultivars and FI hybrids and suitable production technologies has largely contributed to the production and productivity. With changes in incomes and consumption patterns, demand for vegetables has been increasing every year.

In Thiruvannamalai district, the area under vegetable crops is 4260 ha. The major vegetable crops cultivated in the district are cucurbits (Cucumber, Gourd, Watermelon, pumpkin), solanaceous vegetables (Brinjal, Bhendi, Tomato, Chilli), and leafy vegetables. The vegetable growing has been one of the main sources of income for larger number of farmers in the district.



Problems identified

Farmers in Thiruvannamalai district are spending huge money on fertilizers. It is of great concern that each farmer is spending about 60-70 % of cost of production only on fertilizers. KVK has conducted a survey in the vegetable growing area in the district revealed that farmers are applying fertilizers indiscriminately. No farmer is aware of recommended dosage of fertilizers for vegetable crops. The role of micronutrients was known to very few farmers. The yield and income levels of vegetables have started fluctuating due to problems mentioned here under :



- Imbalanced nutrition
- Lack of micronutrient application
- Lack of organic addition
- Reduction in soil fertility

B. Plan, implementation of activities and support by KVK

The KVK has acquired from IIHR, Bengaluru the successful technology called Vegetable special, a micronutrient formulation which can boost the yield in vegetable crops by 20-30%. In order to make available the product in the locality for the easy adoption by farmers, the KVK has established the vegetable special production unit and supplying it to farmers since 2014.

Benefits of vegetables special:

- Higher yield (20-30 %).
- Improved quality of vegetables
- Better colour and uniform size vegetables.
- Higher keeping quality

The KVK has included vegetable special as one of the important critical inputs in its activities related to vegetable crops under OFT/FLD, trainings and other extension activities.

The details of the KVK activities are given hereunder:

Name of the activity	No. of programmes	No of farmers benefitted
On Farm testing	6	38
Front Line Demonstration	13	130
Trainings	60	903
Extension activities	42	946
Total	121	2017

Apart from the above activities, awareness on vegetable special technology being created through various in house, off campus and sponsored trainings in collaboration with Department of Horticulture across the district. After seeing the positive results of the technology, it is rapidly spreading to other vegetable growers existing in the district.

C. Output

- Farmers stated that an increase in yield by 20 to 30% was recorded in tomato, brinjal, chillies and gourd crops after using recommended quantity of vegetable special as foliar spray for 3-4 times.
- By using the technology, farmers feel that the quality of the produce in terms of size, weight, taste was also improved.
- The cost on fertilizer also minimized by 15% as the technology has all the required micronutrients.
- The technology also proved that it gives more resistance to crop against pest and diseases.



Details of change in yield and income

Parameters	Bhendi		Brinjal		Chillies		Bittergourd	
	BI	AI	BI	AI	BI	AI	BI	AI
Yield (Q/ha)	181.39	219.48	271.38	344.61	24.63	29.53	326.61	420.88
Yield increase(%)	-	20.99	-	26.98	-	19.89	-	29.00
Net income (Rs.)	187991	249837	210855	246331	85249	153962	380377	599447
BCR	2.36	3.01	2.57	2.92	1.86	2.59	2.12	2.82

Note :**BI** : Before Intervention, **AI** : After Intervention

