

# Enhancement of yield and income of the banana farmers in Padavedu village of Thiruvannamalai district

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## A. Situation analysis / problem statement

The Padavedu village in Polur taluk of Thiruvannamalai district is known for banana cultivation as it is located in Jawathu foot hills. The varieties viz., Karpuravalli, Poovan, Monthan etc., have been cultivated in the village on regular basis. Total number of 151 farm families depend on banana for their livelihood. An area of 155 acres is under banana cultivation in the village. The major soil types of the village are red sandy loam, clay loam and sandy clay loam. The farmers depend majorly on open wells for the irrigation. The village comes under the north eastern climatic zone.

However, the banana farming has started becoming less remunerative for the farmers in the village during recent years, due to **problems mentioned here under:**

- Low productivity
- Panama wilt disease
- Imbalanced nutrition
- Higher incidence of pests (pseudo stem borer) and diseases (Sigatoka leaf spot)
- Lack of adoption of improved production technologies.



## B. Plan, implementation of activities and support by KVK

As the Padavedu village is known for banana in Thiruvannamalai district, the KVK has selected this village as adopted village for implementing various activities for enhancing the income of the banana growers. The details of activities implemented by KVK are detailed hereunder step by step:

### 1. Formation of Farmers Clubs of Farmers Interest Groups

As an initial step, the banana farmers have been grouped as farmers club comprising progressive farmers and Farmers Interest Groups covering almost all the banana farm families. Totally, one farmers club and five Farmers Interest Groups existing in the village. This was a collaborative effort of KVK with NABARD and Department of Horticulture in order to make the technology transfer and adoption process easy.

### 2. Conduction of training:

The on and off campus training programmes were conducted by KVK on various thematic areas mentioned below for the knowledge updation and skill development of banana growers.

1. Integrated Plant Nutrition System
2. Integrated Crop Management
3. Precision farming
4. Integrated Pest and Disease Management
5. Post Harvest Management and value addition.

Total number of 7 training programmes covering 110 farmers conducted in the village.

### 3. Conduction of Front Line Demonstration programmes

The Front Line Demonstration programmes on Integrated Crop Management, Integrated Pest and Disease Management and On Farm Testing on Integrated Disease Management for panama wilt disease were conducted covering 35 farmers in recent years.

The Important technologies demonstrated are:

- Foliar and bunch spray of banana special (Micro nutrient formulation) released by IIHR, Bengaluru.
- Varietal rotation and crop rotation.
- Bunch feeding and bunch covering.
- Ratoon management, green manure.
- Integrated Plant Nutrition System with major emphasis on fertigation, vermi composting and neem cake application as per the soil fertility status.
- Precision farming technologies with major focus on fertigation and irrigation management.
- Integrated Pest and Disease Management with major focus on soil application of *Pseudomonas fluorescens* and *Trichoderma viride*, Pairing and pralinage with carbofuran.
- Corm injection with bavistin, stem injection with azhadirachtin, application of bio fungicide and nematicide for panama wilt management.



### 4. Organisation of exposure visits

In order to pave the way for scientist farmer interaction and acquire knowledge, exposure visit was organized to National Research Centre for Banana, Trichy. Total number of 20 farmers directly benefited.

### 5. Organisation of workshop and exhibitions

With a view to bring all the technology providers at a single point and create linkage with banana farmers for knowledge updation, the exhibitions and workshops on improved technologies of banana have been organized on regular basis in collaboration with State Department of Horticulture.

### 6. Distribution of technical literatures

The technical literatures on improved banana growing technologies were distributed to farmers for the wide dissemination of technological information.

### 7. Field visits and Farm Advisory Services

The KVK scientists have made need based field visits and given farm advisory services to banana farmers in order to overcome the production problems. Timely intervention of KVK scientists helped farmers to reduce the unwanted production expenses and increased the yield and income.

### C. Output

The banana growers under the technical support of KVK have adopted various improved technologies in banana cultivation. As a result, the productivity and income levels have increased satisfactorily as detailed here under:

Crop		Yield (Q/ha)	Gross cost (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	BC Ratio
Banana	Before Intervention	441.17	111283.00	254466.00	143183.00	2.28 : 1
	After Intervention	538.05	91538.00	305580.00	214042.00	3.34 : 1

