

**PANDIT JAWAHARLAL NEHRU COLLEGE OF AGRICULTURE AND  
RESEARCH INSTITUTE  
KARAIKAL – 3  
PUDUCHERRY PRECISION FARMING PROJECT – KARAIKAL REGION**



**PROJECT IMPLEMENTING AGENCY : PANDIT JAWAHARLAL NEHRU COLLEGE OF AGRICULTURE AND RESEARCH INSTITUTE, KARAIKAL – 3**

**TECHNICAL COMMITTEE MEMBERS :** **Dr. R. MOHAN**, NODAL OFFICER  
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The Precision farming project is a hi-tech farming system with the objective of developing market led farming in agriculture/ horticulture. The strategy under this is to bring a change in the way of cultivation in small holdings for local market with different crops/ varieties, to bigger area with a conglomeration of small holdings in a cluster with fewer varieties in a sustainable farming situation so as to have a better say in the market.

The total out lay for the 11<sup>th</sup> five year plan is to bring 1000 Ha under precision farming covering 200 Ha every year in Puducherry (180 Ha) and Karaikal (20 Ha) regions with a budget of Rs. 350 lakhs per year. Under this programme, each farmer having at least one hectare (One acre for Karaikal region) of an area with assured water source is selected for the precision agriculture.

The selected farmers are provided with drip fertigation components/ unit not exceeding Rs. 1 lakh and inputs like seeds/ seedlings, fertilizer, pesticides *etc* not exceeding an amount of Rs. 50, 000/- per Ha for the first three crops taken under the precision farming at 100% subsidized cost. Apart from this, the

technical guidance by a team of technical committee and frequent field visits are provided under this project for those selected beneficiary's fields.

The Pandit Jawaharlal Nehru College of Agriculture and Research Institute is the project implementing agency with the technical collaboration from Tamil Nadu Agricultural University, Coimbatore. The Department of Agriculture, Puducherry is the coordinating and funding agency for the programme.

The programme involves under taking of chisel plough in the selected farmers fields to break the sub soil hard pan for enhancing drainage and aeration of the soil. The drip fertigation system is fitted which increases the water and fertilizers use efficiency. Water soluble fertilizers are supplied systematically and timely through the drip irrigation system and both water and fertilizer nutrients reach directly the root zone area with minimum loss of the critical inputs. Thus, increase in the nutrient uptake of crop, use efficiency and the productivity is expected. Further, as the application of nutrients and water is localized there is substantial control of weed population in the fields.

#### **Reasons for the slow adoption of the technology at Karaikal:**

Even though the project envisages 100 per cent subsidized provision of drip irrigation system and cultivation expenses for the first year and subsequently 100 per cent subsidized cultivation expenses for the second and third year, the following are the reasons that blocked the enthusiastic participation of the farmers in spite of our very high and sustained efforts:

- a. The farmers of Karaikal region are accustomed to cultivate only rice from time immemorial and are reluctant to test any new crop with new technologies.
- b. The farming practice of this region had slowly deteriorated from triple or double crop of rice to single crop of rice and owing to this, most farmers of this region had already shifted their occupation for many reasons.
- c. As this region is fed by river Cauvery, there is no individual water source to the farmers and the fields remain contiguous without any individual approach roads and irrigation channels. Later on when Cauvery water was uncertain, community bore well concepts were introduced in this region and individual farmers don't have their own source of water. Hence, farmers could be seen rarely with their own source of water, power connection, oil engine facilities *etc.*
- d. The most important phenomenon that remains as stumbling block is the fencing of their lands, if they want to do cropping under precision farming during the off season. As there is no cropping

activity during January to September, the lands remain fallow and are the grazing yard for all the animals. Those interested farmers who intend to do cropping under precision farming have to invest on the fencing, otherwise it causes sociological problems.

In spite of the above said problems faced by the farmers, motivational special lectures and explanations about the project were given by the technical team members to the farmers group at the respective Uzhavar Udhaviyagmas as scheduled below and the farmers were convinced by clearing their doubts and explained about the benefits.

Date	Uzhavar Udhaviyagam	No. of farmers attended
12.11.2009	Thalatheru	17
13.11.2009	Thirunallar	20
16.11.2009	Vizhidhiyur	20
17.11.2009	Surakudy and Nedungadu	30
18.11.2009	Thennangudy	15
19.11.2009	Melakasakudy	17
20.11.2009	Kottucherry	26
23.11.2009	T. R. Pattinam	23
24.11.2009	Neravy	12
25.11.2009	Ambagarathur	37
	TOTAL	217

Based on the efforts taken by way of special lectures to the farmers, new application from among various regions of Karaikal were received through the Department of Agriculture for consideration and implementation of the project in their fields.