

**Case Study on ‘e-velanmai’ (electronic Agriculture) Model of Technology Transfer – Aliyar sub basin**

<b>Tanjore wilt in coconut</b>	
Sub basin : ALIYAR Farmer Name : Mrs.Vasanthamani Village : Kariyanchettipalayam District : Coimbatore	
<p>Mrs.Vasanthamani, (w/o S.R.Balasubramaniam) aged 42 years is a leading woman farmer at Kariyanchettipalayam village, Kambalapatti Water Uses Association, Anamalai Block, Pollachi Taluk. She owns 4 acres of garden land, in which 200 coconut trees were grown. She has been enrolled as one of the e-velanmai farmers since July’ 08 and hence her farm is covered under the scheme of e-velanmai for technical advice. She possessed 20 years of experience in agriculture. The soil in her farm was red and suitable for coconut cultivation. The well water is of good quality and is suitable for irrigation. The soil and water samples of the farm were analyzed. The digital images of his farm and affected trees were sent to the e-velanmai expert team at CRS, Aliyar. The scientists diagnosed that the coconut trees were affected with tanjore wilt disease (during the month of June 08). The symptoms recorded by them were,</p> <ol style="list-style-type: none"><li>1. Red colour liquid oozes out from the middle of the stem region</li><li>2. The lower leaves get dried and shed</li><li>3. Button shedding and</li><li>4. Small nuts development</li></ol> <p>To avoid the death of the affected plants she was advised to pour 1% Bordeaux mixture in the soil surrounding the trees by the Scientist team of e-velanmai.</p> <p>The process of applying the fungicide was also taught to the farmer as follows:</p> <p>To prepare 1% Bordeaux mixture, dissolve 1 Kg of copper sulphate in 50 liters of water in a container. Dissolve 1 kg of lime in 50 liters of water in a separate container. Pour the copper sulphate solution in the lime solution slowly by stirring the solution with a wooden stick or glass rod (Don’t use iron rods). Apply the solution to the trees into soil. The farmer adopted the control measure as taught him to him above. Last year due to lack of awareness and knowledge about the application of the fungicide, she didn’t take any control measure. But this year she opines that due to the advice by the e-velanmai project team, her coconut trees were protected from the wilt disease. As a result of the control measure recommended by the e-velanmai expert team, she observed 1. Reduced button shedding, 2. Bigger sized nuts and 3. Greener / healthier trees. She feels confident to carry out coconut farming and said that this is a very useful project to the farmers as farmer is able to get the technical advice over a phone call made to the field coordinator.</p>	

<b>Bud rot disease</b>	
Sub basin : ALIYAR Farmer Name : Mr.Myilsamy Village : Karuppapalayam District : Coimbatore	
<p>Mr.Myilsamy aged 48 years is a farmer at Karuppapalayam village, Avalchinnampalayam Water User's Association, Pollachi South Block, Pollachi Taluk. He had about 3.5 acres of garden land with 224 numbers of 1 year old coconut trees. The soil and water samples of his farm were analyzed and found that, it is suitable for coconut cultivation. He has got 20 years of experience in agriculture and milk business. He is supported by his son who have completed DME and working at LMW, Coimbatore. He has been enrolled as one of the e-velanmai farmers since July 08. His farm is visited once in a week for providing technical guidance. He observed bud rot disease in young coconut trees. The symptoms recorded were</p> <ol style="list-style-type: none"> <li>1. The central bud shed down as we pluck</li> <li>2. In the plucked portion of the sheaths, rotten smelling white fungus appeared</li> <li>3. As new sheaths shed down, the outer old sheaths were left.</li> </ol> <p>As a precautionary measure, to protect other plants, he has been advised to pour 1% Bordeaux mixture / tree. The process was taught to the farmer as follows:</p> <p>To prepare 1% Bordeaux mixture dissolve 1 Kg of copper sulphate in 50 liters of water in a container. Dissolve 1 kg of lime in 50 liters of water in a separate container. Pour the copper sulphate solution in the lime solution slowly by stirring the solution with a wooden stick or glass rod (Don't use iron rods). The farmer poured the 1% Bordeaux mixture in the center of the young trees.</p> <p>Later he observed control in the spread of disease to other plants.</p>	
<b>Micronutrient deficiency -coconut</b>	
Sub basin : ALIYAR Farmer Name : Mr. Muthukumarasamy Village : Ramanathapuram District : Coimbatore	
<p>One of the progressive farmers of our e-velanmai scheme, Mr. Muthukumarasamy S/o Arumuga gounder owned 29 acres of coconut orchard at Ramanathapuram, Mannur. Nearly 50 % of the trees were affected. The digital image of the affected tree was photographed and sent to evelanmai experts working at CRS, Aliyar. The experts diagnosed it as micronutrient deficiency. However the farmer had not at all applied any micronutrients to the trees. Later the recommendations were passed on to the field coordinator through internet by the experts team and our field coordinator explained</p>	

the importance of giving micro nutrients to his trees and created awareness on how to apply it to the farmer. The farmer got convinced and started applying micronutrients. He gave root feeding of 200ml of micronutrient mixture to about 250 trees as a trial & he observed good results i.e. stoppage of button shedding as well as improvement in the size of nuts. The farmer had latter continued to give micronutrients to the remaining trees in his farm.. One pocket of coconut tonic (200ml/ tree) costs Rs. 5 and it was purchased from TNAU. The farmer is very much satisfied to see the effect of the recommendation received from e-velanmai experts' right at the door steps of his farm.

### **Aphids and Pod borer in cowpea**

Basin : ALIYAR  
Farmer Name : Mr.Ramasamy  
Village : Karuppapalayam  
District : Coimbatore

Mr.Ramasamy, whose age is 53 is a leading farmer at Karuppapalayam village, Avalchinnampalayam Water Users Association, Pollachi South block. He had 4.75 acres of garden land, having 350 coconut trees. He had 30 years of experience in agriculture. His farm had red soil and suitable for cultivation of cowpea and coconut. The well water was also found to be suitable for irrigation through water sample analysis. The soil and water samples of the farmer's field were analyzed to provide suitable recommendation details. He cultivated the cowpea crop throughout the year, ie Chittirai pattam, Aadi pattam, Karthigai pattam three seasons as intercrop in coconut trees. The main reason for the farmer to cultivate cowpea crop is because it is a crop which helps in nitrogen fixing activity. He believed that the cowpea when intercropped with coconut trees looks healthy and productive also. The farmer was covered with continuous technical support under the e-velanmai project operated by CARDS, TNAU, Coimbatore.

Field level co-coordinator visited his farm on a phone call throughout the cropping period for assessing the crop status with respect to any pest problems and took digital images of the symptoms of affected parts of the crop and transferred the same through file flyer.com to the scientist team at TNAU, Coimbatore, for receiving expert recommendation for the problems identified. The agricultural experts consisted of multidisciplinary team of scientists comprising of Agronomist, Soil scientist, Entomologist, Pathologist, Crop physiologist and Horticulturist. They diagnosed the photographs sent by the field co-ordinator and sent the recommendations directly to the field co-ordinator using mobile phone. These recommendations were transferred to the farmers. Mr.Ramasamy has two daughters who had completed B.E degree courses and employed in Chennai and Bangalore I.T based companies. He also discussed with his daughters regarding the e-velanmai scheme and got convinced to adopt the technologies transferred by the scientists of TNAU to his field through the e-velanmai model of extension. He faced the problem of incidence of aphids and pod borer in cowpea from 65th day after sowing. Last year he spent Rs 40/ to spray Rogor 500 ml/acre. He got an yield of 4200 Kg/acre. He incurred total cost of cultivation about Rs. 9500/-acre. He got a yield of 4200 Kg/acre and sold for Rs.11/kg and he got the net

grain of Rs. 36700/acre. But this year due to the technical advice and recommendation given by our e-velanmai technical team , he sprayed Acephate 250 gm /acre by spending Rs 460/- in addition to the Rogar spray(Rs 40/-). He incurred total cost of cultivation as Rs. 9960/ acre. He got a yield of 4750 Kg /acre (ie additional yield = 4750-4200 =550 Kg) and sold for Rs.11 with a net gain of Rs. 42290/- So the difference in the net profit was Rs 5590/ and this was completely attributed due to the adoption of the recommendations given to him through e-velanmai project, as reported by the farmer.

**Economics (Rs./acre)**

<b>Items</b>	<b>Last year(2007) per acre</b>	<b>Current year (2008) per acre</b>
<b>Cowpea COC/acre</b>	<b>9500</b>	<b>9960</b>
<b>Pesticide cost</b>	<b>410</b>	<b>870</b>
<b>Yield</b>	<b>4200Kg</b>	<b>4750 Kg</b>
<b>Average selling price</b>	<b>11Rs/ Kg</b>	<b>11Rs/ Kg</b>
<b>Gross income</b>	<b>Rs 36700</b>	<b>Rs 42290</b>
<b>Net income</b>	<b>-</b>	<b>Rs 5590</b>