

**TAMIL NADU AGRICULTURAL UNIVERSITY  
KRISHI VIGYAN KENDRA, VILLUPURAM DISTRICT**

**VII SCIENTIFIC ADVISORY COMMITTEE MEETING  
19.6.2013**

**Venue: Seminar Hall, Krishi Vigyan Kendra  
Time: 10.00 AM**

**TABLE AGENDA FOR SCIENTIFIC ADVISORY COMMITTEE MEETING**

<b>Agenda Item No.</b>	<b>Particulars</b>
	Invocation
	Welcome
01	Chairman's opening remarks about KVK
02	Constitution of SAC and self introduction by SAC : Programme Coordinator members and invitees
03	Action Taken Report on the previous SAC : Programme Coordinator meeting
04	Overall progress report and action plan for : Programme Coordinator forthcoming season
05	Salient technical achievements in detail : Subject Matter Specialists
06	Interaction and discussions : Members and Invitees
07	Finalization of action points : Chairman
08	Any other agenda with the permission from Chairman
	Vote of Thanks
	National Anthem

## AGENDA NOTES

### Agenda Item No. 01

#### Chairman's Opening Remarks about KVK

##### a) Establishment details

S. No	Particulars	Details
01	Name of the KVK	Villupuram
02	Postal address of the KVK	Krishi Vigyan Kendra Tamil Nadu Agricultural University Tindivanam, Villupuram District – 604 002
03	Telephone number/Fax/email and Web site address of the KVK	Telephone: 04147 -250001, 0414-7250002 Fax: 04147 250001 <a href="mailto:kvktvm@tnau.ac.in">kvktvm@tnau.ac.in</a> <a href="mailto:kvktvm@yahoo.co.in">kvktvm@yahoo.co.in</a> <a href="http://www.kvktvm.org">www.kvktvm.org</a>
04	Name of the Host Organization	Tamil Nadu Agricultural University
05	Postal address of the Host Organization	Tamil Nadu Agricultural University Coimbatore – 641 003 Tamil Nadu
06	Telephone number/Fax/email and Web site address of Host Organization	0422 6611233 Fax: 091-0422-6611433 <a href="mailto:dee@tnau.ac.in">dee@tnau.ac.in</a> <a href="mailto:vctnau@tnau.ac.in">vctnau@tnau.ac.in</a> <a href="http://www.tnau.ac.in">www.tnau.ac.in</a>
07	Sanction Order Details	F.No.16-12/2003-AE-I-dated 16.8.2003, AE-I-dated 22.3.04 of the ICAR, New Delhi
08	Name of the Programme Coordinator	Dr. N. Sathiah, Ph.D
09	Total land area with the KVK in ha.	16.8 ha

##### b) Mandate

The overall mandate of the KVK is to develop and disseminate location specific technological modules at district level through Technology Assessment, Refinement and Demonstration and to act as Knowledge and Resource Centre for agriculture and its allied activities. The specific activities to carry out this mandate are:

- Conducting on-farm testing to identify the location specificity of agricultural technologies under various farming systems
- Organizing frontline demonstrations to establish production potential of various crops and enterprises on the farmers' fields

- Organizing need based training of farmers to update their knowledge and skills in modern agricultural technologies related to technology assessment, refinement and demonstration, and training of extension personnel to orient them in the frontier areas of technology development
- Creating awareness about improved technologies to larger masses through appropriate extension programmes
- Production and supply of good quality seeds and planting materials, livestock, poultry and fisheries breeds and products and various bio-products to the farming community.
- Work as resource and knowledge centre of agricultural technology for supporting initiatives of public, private and voluntary sector for improving the agricultural economy of the district.

**c) Staff details**

S. No	Sanctioned Post name	Name of the incumbent	Designation	Discipline	Qualification	Pay Scale	Date of joining	Permanent/Temporary
01	Programme Coordinator (Agrl. Extn./ Agronomy)	Dr.N.Sathiah	Professor and Head	Agricultural Entomology	Ph.D	37400-67400 +10000	16.04.2010	Permanent
02	Subject Matter Specialist (Horticulture)	Dr.M.Renuga	Assistant Professor	Horticulture	Ph.D	15600-39100 + 7000	05.08.2009	Permanent
03	Subject Matter Specialist (Agrl. Entomology/Plant Pathology)	Dr.K.Kavitha	Assistant Professor	Plant Pathology	Ph.D	15600-39100+ 6000	13.12.2012	Permanent
04	Subject Matter Specialist (Agronomy/Agrl. Extension.)	Dr.K.Natarajan	Assistant Professor	Seed Science Technology	Ph.D	15600-39100+ 6000	31.12.2009	Permanent
05	Subject Matter Specialist (Agrl.Engineering)	Dr.C.Tamilselvi	Assistant Professor	Crop Physiology	Ph.D	15600-39100 + 6000	30.11.2012	Permanent
06	Subject Matter Specialist (Agroforestry/Plant Breeding and Genetics/Seed Science and Technology)	Dr.K.Senthamizh	Assistant Professor	Nematology	Ph.D	15600-39100 + 6000	05.12.2012	Permanent
07	Subject Matter Specialist (Home Science )	Vacant since 1.6.2013	-	-	-	-	-	-
08	Programme Assistant	Mrs.A.Kalyani-ammal	Assistant	-	S.S.L.C	5200-20200 + 2800	01.03.2012	Permanent
09	Programme Assistant (Computer)	Mrs.A.Vijalakshmi	Programme Assistant (Computer)		B.Sc., (Comp.Sci.)	9300-34800 + 4400	12.11.2012	Permanent
10	Farm Manager	Miss.S.Kamaladevi	Farm Manager		M.Sc. (Horti.)	9300-34800 + 4400	11.3. 2013	Temporary
11	Assistant cum Accountant	Th.S.Kalaivanan	Administrative Officer		M.A	9300-34800 + 5400	17.12.2012	Permanent
12	Stenographer Grade III	Th.D.Amrithalingam	Lab Assistant		S.S.L.C	5200-20200 + 2400	09.08.2010	Permanent
13	Driver 1	Th.R.Mohan	Jeep Driver		9 <sup>th</sup> STD	5200-20200	01.04.2009	Permanent
14	Driver 2	Th.G.Subramanian	PUSM		S.S.L.C	4800-10000	01.03.2006	Permanent
15	Skilled Supporting staff -1	Th.P.Raja	PUSM		8 <sup>th</sup> STD	4800-10000	01.03.2010	Permanent
16	Skilled Supporting staff -2	Th.K.Uthramoorthy	PUSM		6 <sup>th</sup> STD	4800-10000	25.07.2007	Permanent

## Agenda Item No. 02

### Constitution of SAC and self introduction by SAC members and invitees

(Any change in the constitution to be specified by the Programme Coordinator in each SAC)

1.	Vice Chancellor of SAU	Dr.K.Ramasamy, Ph.D Vice Chancellor Tamil Nadu Agricultural University Coimbatore 641 003	Chairman
2.	Zonal Project Director, Zone VIII, ICAR Bangalore	Dr.S.Prabukumar, Ph.D Zonal Project Director Zone VIII, ICAR Bangalore 560 024	Member
3.	Director of Extension Education	Dr.K.A.Ponnusamy, Ph.D Director of Extension Education (i/c) Tamil Nadu Agricultural University Coimbatore 641 003	Member
4.	Director of the nearest ICAR Institute	Dr. M.M. Mustafa, Ph.D Director National Research Center for Banana Thogamalai, Tahyanoor Post, Trichy 620 102	Member
5.	Professor and Head of the nearest SAU Institute	Dr. R. Vaithyanathan, Ph.D Professor and Head Oilseeds Research Station Tindivanam 604 002	Member
6.		Dr. R.Paneerselvam, Ph. D Professor and Head Sugarcane Research Station Cuddalore 607 001	Member
7.	Department of Agriculture	Mr.K.Sekar, B.Sc(Agri) Joint Director of Agriculture Collectorate Complex Villupuram 605 602	Member
8.	Project Director ATMA	Mr.K.Sekar, B.Sc(Agri) Joint Director of Agriculture Collectorate Complex Villupuram 605 602	Member
9.	Department of Horticulture	Mr. K. Rasu, B.Sc(Agri)	Member

		Deputy Director of Horticulture Collectorate Complex Villupuram 605 602	
10.	Department of Agricultural Engineering	Mr. G. Mani, M.E(Agri) Executive Engineer (AE) Agriculture Engineering Department KK Road, Villupuram 605 602	Member
11.	Department of Animal Husbandry	Mr. K. Alakarasan Regional Joint Director of Animal Husbandry Collectorate Complex Villupuram 605 602	Member
12.	Lead Bank Official	Mr.A. Balachandran, B. Sc(Agri) Chief Manager (Lead Bank) Indian Bank 793 Nehruji Road Villupuram 605 602	Member
13.	Manager/AGM NABARD	Mr. N. Vikraman, M. Tech Assistant General Manager (District Development) NABARD, Govindharajulu street, Near L.G. Service centre Villupuram	Member
14.	Official from AIR/Doordharshan	Mr. M. Sivapragasam Station Director (i/c), All India Radio, Pudhucherry 605 001	Member
15.	Department of Fisheries	Mr. T. Sreenivasan, B. F.Sc Assistant Director of Fisheries, 1, Vishwalinga Achari street, Villupuram 605 602	Member
16.	Department of Forestry	Mr. T. Sivakumar Regional Manager, Tamil Nadu Forest Plantation Corporation Ltd., 37, Dhanalakshmi Garden, Villupuram 605 602	Member
17.	Department of Sericulture	Mr. K. Vishvanathan, M. Sc Assistant Director of Sericulture, Elchatiram Road, Vazhudhareddy,	Member

		Villupuram. 605 602	
18.	Department of Social Welfare	Mr. Pechiyappan The District Social Welfare Officer, Collectorate Complex, Villupuram 605 602	Member
19.	Two representatives from farmers	Mr. B.Vishwanathan, B. A S/o G.Batchu V.Nallam Post Tindivanam Taluk-605 651	Member
20.		Mr. C.Rangaraju, S/o Chinnasamy 601E, Maruthur Post Ulundurpet Taluk Villupuram Dist	Member
21.	Two representatives from farm women	Mrs.A.Ahmed Fathima W/o Akbar 12/3, Bhutan sahib street Tindivanam 604 001	Member
22.		Mrs. N.Puspharani W/o. Natarjan 9, Vinayagar kovil street Mariyamangalam, Kattalai post Tindivanam	Member
23.	Programme Coordinator	Dr. N. Sathiah, Ph.D Programme Coordinator Krishi Vigyan Kendra Tindivanam 604 002 Villupuram Dist	Member Secretary
24.	Other invitees if any	Dr. T. Kalaimani, Ph. D Professor and Head Vegetable Research Station Tamil Nadu Agricultural University Palur 607 102 Cuddalore District	Special Invitee
25.		Th. Selvam, Thavadipattu Kallakurichi Taluk Villupuram District	Special Invitee
26.		Th. Govindhan Poosapadi	Special Invitee

		Chinnasalam Taluk Villupuram District	
27.		Th. A. Narayanan S/o. Annamalai Kalan Street Olakur Village & post Tindivanam Taluk – 604 305 Villupuram District	Special Invitee
28.		Th. B. Akbar S/o. Basheer 12/3, Buttan Saheeb street, Bootheri, Tindivanam Villupuram District	Special Invitee
29.		Th. V. Chandrasekar Melmavilangai Keelmavilangai post Tindivanam Tk – 604 207 Villupuram District	Special Invitee
30.		Th. P. Adhimoolam S/o. Parsuraman Katrampakkam main road Nainar palaiyam Vanur Taluk Villupuram District	Special Invitee
31.		Th. Ravichandran Ponnankuppam Asur post Vikravandi Block Villupuram District	Special Invitee
32.		Th. Deepak Panchalam Olakkur block Vikravandi Block Villupuram District	Special Invitee
33.		Th. S. Vasudevan S/o. V. Sundara Reddiyar No. 1 G.S.T Road	Special Invitee



		Sendur Village & post Tindivanam Taluk – 604 302 Villupuram District	
34.		Th. P. Sethuraman S/o Palani Aanpakkam Village, Vanur Tk Villupuram District	Special Invitee
35.		Th. Mr. R.Natarajan S/o Rangasamy Kumulam post Kandamangalam block	Special Invitee
36.		Th. Ramadass Erikkarai st Nerkunam Poonthamalli Road Chennai – 600 107	Special Invitee
37.		Th. K. Muruganandam K-2/1, Staff Quarters Anna University Chennai – 600 025	Special Invitee
38.		Th. V. Manoharan, P.M. Kuppam, Pichivakkam post Sriperumpudur Tk, Kanchipuram Dt. – 631 553	Special Invitee
39.		Th. P. Poorasamy S/o. Th. Perumal Perangiyur village Thiruvannainallur Block, Villuppuram Dt.- 607 107	Special Invitee
40.		Tmt. R. Sathya W/o. Rajagopal Edaiyappatu Veedoor & post Viravandi via Vanur Tk - 605 652	Special Invitee

### Agenda Item No. 03

#### Action Taken Report on the previous SAC meeting

S. No	Recommendation	Proposed by	Action Taken (to be quantified)
1.	The KVK has to demonstrate newer crop releases incorporating Integrated Crop Management techniques and seed production strategies in order to increase the production and productivity.	Prof. Dr. P. Murugesu Boopathi, Ph.D Vice Chancellor Tamil Nadu Agricultural University Coimbatore 641 003	The newly released varieties of paddy viz., ADT 49 and Co 50 were demonstrated under SRI method in the Instructional Farm of KVK during 2012 Samba season in 2.5 acres area. Cleaned seeds (TFL) produced from the above was 2538 kg and 1076 kg, respectively. Similarly, Blackgram VBN 6 and 7 were raised KVK instructional farm in 1.2 acres. Totally 132 and 323 kg cleaned seeds were produced. The seeds were sold to 11 farmers of Vilupuram district so far. Under the category FLD the technologies were demonstrated in paddy, blackgram and groundnut during 2012-13.
2.	Cultivation of paddy, oilseeds and pulses must be encouraged through training and seed production programmes in farmers fields.	Prof. Dr. P. Murugesu Boopathi, Ph.D Vice Chancellor Tamil Nadu Agricultural University Coimbatore 641 003	<u>Paddy:</u> Two FLDs on popularization of paddy ADT 49 and CO 50 were conducted in farmers field (20 Nos; 10 ha) in Kallakurichi and Thiruvennai Nallur Blocks of Villupuram District during 2012-13. <u>Pulses:</u> Two FLDs on popularization of blackgram VBN 6 and greengram VBN 3 were conducted in farmers field (20 Nos; 10 ha) in Thirunavallur and Kandamangalam Blocks of Villupuram District <u>Oilseeds:</u> Production and integrated crop management practices in groundnut var.CO 6 was conducted in the farmers field (10 Nos; 5 ha) in Chinnasalem Block during 2012-13.
3.	Season-long training in horticultural crops has to	Mr. C. Rangaraju Progressive farmer and SAC	Totally 12 trainings (On/off campus) related to ICM in chilli hybrid – CO

	be given to the farmers to enhance the farm production.	Member Ulundurpet, Villupuram	(CH) 1, 13 trainings related to ICM in CO 5 onion (Small Onion) and 9 trainings related to ICM in watermelon under mulching were given to farmers, farm women and rural youths. Three vocational trainings on nursery production technology in mango was given.
4.	In the outreach programmes to be carried out by the KVK, extranees and progressive contacties have to be used as resource persons for horizontal integration technologies.	Dr. P. Kalaiselvan, Ph.D Director of Extension Education Tamil Nadu Agricultural University Coimbatore 641 003	The farmers who have adopted the technologies such as SSI, SRI and PF were utilized as resource persons in the sponsored trainings programmes viz., SSI nursery technology, SSI technology awareness and NADP precision farming during 2012-13. Under the ATMA programme on <i>Sensitization for the ATMA functionaries</i> extranee farmers were included as resource persons.
5.	In TAR&D, technologies from other Institutes will have to be assessed and demonstrated by the KVK Scientists within the campus and off campus programmes.	Dr. C.V. Sairam, Ph.D Senior Scientist Zonal Project Directorate Zone VIII, ICAR Bangalore	Technology of IHR Bangalore and IISR, Calicut were used for the two OFTs viz., Assessment of foliar nutrition for fruit set and yield in Mango and Assessment of biological control of rhizome rot of turmeric in vertisol areas. Besides, the released technologies of TANUVAS were integrated in livestock programmes. During 2013-14 programme the KVK will be undertaking the evaluation of confectionary groundnut released by national and international institutes.
6.	The KVK should take part with greater zeal in Central and State Sector Schemes to achieve the State mission in crop production and allied activities.	Prof. Dr. P. Murugesu Boopathi, Ph.D Vice Chancellor Tamil Nadu Agricultural University Coimbatore 641 003	KVK, Tindivanam actively imparted on campus training under the different Central and State department schemes viz., NADP PF and SSI by Commisionarate of Sugars. Totally 1211 farmers underwent technology integration programmes at this Kendra. Under the ATMA programme two capacity building programmes were given for the Farmer Friends (R-E-F) and one programme for the BTM and

			SMS. Similarly, 450 Farmer Friends and 58 ATMA functionaries underwent one day capacity building programmes with reference to the Uzhavar Peruvizha during April 2013.
7.	Commodity group approach has to be taken up and group dynamism concept has to be infused among the farming community.	Prof. Dr. P. Murugesu Boopathi, Ph.D Vice Chancellor Tamil Nadu Agricultural University Coimbatore 641 003	SMART Rural Technocrat Initiative in Villupuram District (Special Programme) was submitted under the Special Programme for the Financial Year 2013-14. Commodity Group Approach Programme in watermelon has been sanctioned by the ZPD for 2013-14.
8.	The quality seed and planting material production will have to be taken up by the KVK in the Instructional Farm as a priority programme during XII Plan. Besides, prominent technologies have to be demonstrated in the Instructional Farm.	Many members	A total of 76.81qtls of seeds (BS/TFL) of paddy, pulses and oilseeds were produced and delivered to state seed farms, farmers, neighbouring KVKs of Tamil Nadu, Kerala and Karnataka. With regard to planting material 5000 nos. of mango grafts (Alphonza, Bangalora, senthura, Neelam and Himayadhin) were produced and distributed to farmers on need basis and to DDH, Villupuram. The latest technologies in horticulture under cafeteria approach, silvipasture model, casuarinas model orchard, synchronized sowing using seed drill, bioproducts production were demonstrated in the KVK.
9.	The KVK has to demonstrate farm mechanization and natural resource management concepts including microirrigation in crops and land management through awareness programmes.	Mr. C. Rangaraju Progressive farmer and SAC Member Ulundurpet, Villupuram Mr. Viswanathan Progressive farmer and SAC Member V. Nallalam, Mailam Mr. R.Manivelan, Progressive farmer and SAC Special invitee, Mailam, Villupuram	During 2012-13, FLD on Mechanization in black gram and groundnut cultivation, and moisture conservation practices for rainfed groundnut was demonstrated. During the current year 2013-14, FLD on Popularization of mechanization in irrigated Groundnut will be implemented during Rabi. In the Instructional farm demo plots were maintained for in situ moisture conservation by adopting mulching, drip and fertigation technology for vegetable crops. The Natural Resource Management concept will be focal

		Mr. K. Ramadoss, ODL Student and Special Invitee Cheyyar, Tiruvannamalai Mr. K. Badmanaban Assistant Executive Engineer Department of Agricultural Engineering, Tindivanam	theme in KVK activities during 2013-14.
10.	Crop boosters have to be promoted by the Krishi Vigyan Kendra in FLD and linked programmes.	Mr. C. Rangaraju Progressive farmer and SAC Member Ulundurpet, Villupuram	In all the FLDs in 2012-13 related to pulses (2 Nos; 10 ha.) and oilseeds (1 No.; 2 ha) the use of crop boosters viz., Pulse Wonder and Groundnut Rich were demonstrated.
11.	Knowhow and do how on SSI and Precision Farming must be imparted through trainings. Proper feedbacks of the farmers have to be obtained the technology.	Dr. S. Nazeer Ahmed, Ph.D Professor and Head Sugarcane Research Station Cuddalore	The technologies under SSI was imparted to farmers of Villupuram district through on campus, off campus sessions and method demonstration programmes. Totally 181 shadenet farmers attended the programmes. By the adopting the technology imparted by this Kendra, Mr. P. Poorasamy has recorded an yield of 106.5t/ac. The feedback was given to the Research System in the State Level Farmers Interface on 28.2.2013 at TNAU, Coimbatore. Besides, the Success Story was incorporated in the 44 <sup>th</sup> EEC Meeting.
12.	Exposure visits have to be organized by the KVK to centres of excellence and to locations where distinct activities are being carried out.	Many members	<u>TNAU, Coimbatore:</u> Farmers numbering 23 attended fodder production training cum exposure visit under NADP Programme at TNAU, Coimbatore on 28.3.2013. In the State Level Farmers Meet conducted at TNAU, Coimbatore during 27-28 February, 2013, ten Villupuram District farmers attended.  <u>IFGTB, Coimbatore:</u> In the Tree Mela held during 24-25 February, 2013, at IFGTB, Coimbatore, ten farmers participated.

			<p>TNAU-NRCM programme: Four farmers participated in the Mushroom Mela jointly organized by TNAU and NRCM, Solan held at Salem during March 2013.</p> <p><u>DSR, Hyderabad:</u> Under the INSIMP programme, two members of Kurinji Mahalir SHG, Veerapandi, Thirukoilur were taken for value addition in millets at the Directorate of Sorghum Research, Hyderabad during March, 2013.</p> <p><u>Others:</u> Under the laterally funded programmes viz TN-IAMWARM, NADP 50 farmers were taken on exposure visits to Banana Ripening Unit at Theni, HC&amp;RI, Periyakulam during November 2012.</p>
13.	The facilities available at TNAU website such Agri Tech Portal, must be made available to all small, marginal and big farmers as part of ICT initiatives.	Dr. C.V. Sairam, Ph.D Senior Scientist Zonal Project Directorate Zone VIII, ICAR Bangalore	<p>Touch screen facility is made available for the farmers visiting to browse the TNAU and related websites viz., Agri Tech Portal, weather forecast and DMIC.</p> <p>A separate website for the KVK, <a href="http://www.kvktvm.org">www.kvktvm.org</a> has been hosted recently in order to disseminate all activities of KVK.</p>
14.	The KVK should popularize ecofriendly pest and disease management methods and newer molecules of pesticides among the farmers and other stakeholders.	Many members	During 2012-13, five on campus and ten off campus trainings were organized in popularization of ecofriendly pest and disease management methods to the farmers. A total of 81 extension functionaries were give training on newer molecules of agrochemicals in agriculture during 2012-13.
15.	The KVK has to organize exclusive programmes in agroforestry for the special category of farmers.	Mr. B. Viswanathan Progressive farmer and SAC Member V. Nallalam, Mailam	<p>KVK along with IFGTB Coimbatore has evolved KVK-VVK interface and is presently maintaining casuarina plantation (<i>C. equisetifolia</i>) for seed orchard in KVK farm.</p> <p>A training programme on agroforestry</p>

			<p>was jointly organized with the Dept. of Forestry, Villupuram District during 2012-13.</p> <p>The Director General, ICFRE inaugurated the KVK-VVK interface on 10.12.2012 at the Centre.</p>
16.	Crop cafeteria approach shall be followed in the KVK in order to showcase various technologies to the visiting the farm in different seasons.	Many members	Horticulture cafeteria with different TNAU released vegetables were maintained in the KVK with mulching and drip technology. A total of 221 batches of farmers visited the crop cafeteria during 2013-14.
17.	Focus has to be given to watermelon and muskmelon in the outreach programmes.	Prof. Dr. P. Murugesha Boopathi, Ph.D Vice Chancellor Tamil Nadu Agricultural University Coimbatore 641 003	Through PF technology many on/off campus trainings were organized by this Kendra on watermelon and muskmelon cultivation. Presently the farmers are adopting this technology and raising water melon through the year and getting higher returns. Besides, the KVK has been organizing exposure visits for the NADP-PF farmers, ODL-B.F(Tech) farmers to the watermelon areas for greater understanding. The feedback on these crops and the KVK's role under the main and lateral projects were given to Dr. Paul Siddhu, World Bank Consultant on 14.5.2013.
18.	District specific technologies with reference to horticulture crops should be demonstrated in the Instructional Farm of the KVK.	Mr. N. Pannerselvam Deputy Director of Horticulture Villupuram	As Villupuram is near the semi urban peri market the scope of cultivating different vegetables under mulching was demonstrated in the Instructional farm of KVK. Also, arrangements have been made to introduce Coccinia, CO 1 during 2013-14 as replacement for the existing Padappai local which is popular among the farmers. The planting material production is scheduled for July 2013.
19.	Arrangements have to be made to work in convergence with Animal Husbandry Department in	Dr. D. Kathiresan Director Extension Education Tamil Nadu Veterinary &	The KVK has been taking up the programmes on livestock in convergence with the Department of Animal Husbandry. The KVK

	areas like livestock nutrition and disease management.	Animal Sciences University Chennai	participated in the Animal Health Campaign held at Irumabai in which Mr. Anil Meshram, SPCM attended on 15.11.2012. Also, the KVK organized a health campaign on 8.10.2012 in Mailam Block in which the AH Department staff attended. The KVK shared platform with the Department of Animal Husbandry during the Uzhavar Peruvizha 2012 and 2013.
20.	The platform available with All India Radio should be utilized effectively.	Mr. G.Selvam Programme Executive All India Radio, Pudhucherry representing the Station Director All India Radio, Puducherry	Totally 17 season specific technological information, interview etc were recorded and broadcast in AIR, Puducherry.
21.	Cross learning efforts should be encouraged for the farmers of KVK.	Many members	The contacties of the KVK have attended many technological update programmes in other KVKs. The INSIMP farm women attended the interface at KVK Sandhiyur during March 2013. In addition, they were exposed to the millets processing at DSR, Hyderabad during March 2013. Mushroom farmers attended the TNAU-NRC Mushroom Mela and learnt the newer methods in mushroom value addition and processing. Farmers of the KVK, Thiruvannamalai attended two days training on groundnut seed production at our KVK during March 2013. In addition to the above, farmers from many parts of the state, Andhrapradesh and Karnataka visited this KVK as part of the learning exercise. The KVK farmers were taken on exposure visits to different places on 54 occasions in which 1603 men and 98 women farmers participated during 2012-13.
22.	The Success stories and other achievements have	Dr. P. Kalaiselvan, Ph.D Director of Extension	Many success stories were documented from this Kendra on SSI, PF and



	to be documented.	Education Tamil Nadu Agricultural University Coimbatore 641 003	Mushroom value addition etc. A video documentation has been produced by the DoEE and released during the 44 <sup>th</sup> EEC which contained the success stories of the KVK, Tindivanam farmers. The case studies and success stories of the farmers have been telecast in the private broadcasting channels regularly.
23.	Integrated Farming System concepts have to be popularized among the farmers.	Dr. D. Kathiresan Director Extension Education Tamil Nadu Veterinary & Animal Sciences University Chennai	IFS concept was popularized through FLD programmes. Major focus was given to IFS during Uzharvar peruvizha programmes. An IFS Demo model is being developed at the Kendra.
24.	Researchers-Extension Functionaries and Farmers interface have to be organized in order to obtain necessary feedback from the farmers.	Dr. P. Kalaiselvan, Ph.D Director of Extension Education Tamil Nadu Agricultural University Coimbatore 641 003	Two programmes were organized for the Farmers and Farmer Friends in Chinnasalem on 15.2.2013 and Olakkur farmers on 8.3.2013 at KVK, Tindivanam. Feedbacks were obtained on the various aspects in agriculture and allied enterprises and incorporated in the Annual Action Plan 2013-14.
25.	Action must be taken to include technology products and technologies of latest origin in FLD.	Dr. C.V. Sairam, Ph.D Senior Scientist Zonal Project Directorate Zone VIII, ICAR Bangalore	All the FLDs are conducted based on the new technologies released from the university and other ICAR, SAUs. Technology products included Crop Boosters, Banana Special, new generation molecules of agrochemicals etc., during 2012-13.
26.	Capacity building trainings may be provided to the farmers through schemes such as ATMA, NADP, NABARD etc.	Dr. C.V. Sairam, Ph.D Senior Scientist Zonal Project Directorate Zone VIII, ICAR Bangalore	Training to ATMA, NADP, NABARD farmers is being carried out regularly by this KVK. Two pre-kharif (2012-13) trainings and one on Horticulture crops during rabi 2012 were given to the Chief Volunteers of NABARD. Under the NADP and ATMA programmes many capacity building programmes were given.
27.	Village level and regional level exhibitions have to	Dr. C.V. Sairam, Ph.D Senior Scientist	In all the outreach programmes of the KVK and state sponsored Uzharvar

	be organized in a collective way by the converging departments in which the KVK has to demonstrate all new technologies.	Zonal Project Directorate Zone VIII, ICAR Bangalore	peruvizha exhibitions were conducted at local village level, Block Level and District Level. Eighteen exhibitions were organized during 2012-13 by the Centre.
28.	Subscription to the University publication, Uzhavarin Valarum Velanmai should be promoted.	Dr. P. Kalaiselvan, Ph.D Director of Extension Education Tamil Nadu Agricultural University Coimbatore 641 003	Regular subscriptions are being collected by the Scientists from farmers. In addition, under ATMA programme in Olakkur Block the subscriptions were mobilized. Subscription for 200 farmers were arranged during 2012-13.

## Agenda Item No.04

### Overall progress report and action plan for forthcoming season

#### a) Agricultural scenario

#### i) Major farming systems/enterprises

S. No	Farming system/enterprise
a)	Wetland
	Rice                      -Rice                      -Sesame
	(June-July)              (Aug-Sep)              (March-April)
	Rice                      -Rice fallow pulses
	(Aug-Sept)              (Jan-Mar)
	Sugarcane
	(Dec-Jan)
b)	Gardenland
	Groundnut              Groundnut              Sesame
	(June-Sept)              (Oct-Jan)              (Feb-March)
c)	Dryland
	Groundnut              -                              /Sesame/Pulses
	Groundnut
d)	(June-Sept)              (Oct-Jan)
	Othercrops
	Cotton, tapioca, cashew, chillies, watermelon, brinjal,
e)	gourds, crossandra, jasmine, banana,
	coconut, mango, guava, casurina
	Other enterprises
	EDP-Home products, flower crop and agro-forestry nursery, cashew processing, dairy farming, goat and sheep rearing

ii) Details of problems and thrust areas

S. No	Name of the Operational Village	Crop/Enterprise	Major problems faced	Thrust areas identified to tackle the problems	Nature of interventions implemented *
<b>2012-13</b>					
1.	Melmalaiyanur Block Chekkadikuppam	Groundnut Pulses, sesame Moth bean	Use of short and medium duration varieties for transplanting methods are not suitable Highly damaged due to heavy and continuous rain The pest and disease incidence are more during pod development and maturity stage (November –December).	Assessment of suitable varieties for transplanted redgram in Villupuram district	OFT, Trainings, Conducted demo on seed treatment with bio inoculants. Transplanting sequence steps demonstrated in the assessment
2.	Mailam Block Kattuchiviri	Rice, Groundnut Pulses, sesame, Flowers	Lack of knowledge about new weedicides Low yield due to non adoption of techniques Persistent problem of weeds	Assessment of weed management in drought tolerant paddy Anna 4	OFT, Training, Method demonstration conducted. Group meeting was conducted
3.	Vanur Block Katrambakkam	Groundnut, Tapioca, Banana Pulses,	Problems in utilization of bacterial inoculants for the groundnut crop	Assessment of sulphur oxidizing bacterial inoculants in groundnut for enhanced uptake of nutrient	OFT, Training, Method demonstration conducted. Group meeting conducted. Farmer shared experience in ATMA FF programme
4.	Olakoor Block Olakoor	Vegetables, Flowers Mango	Low yield, inadequate nutrient management and lack of awareness on use	Assessment of foliar nutrition for fruit set and yield in Mango	OFT, Trainings, Message given to AIR, Puducherry

			of micronutrients No knowledge about delivery mechanism for nutrients		
5.	Chinnasalem Block Ulaganatham	Rice, Turmeric, Tapioca, groundnut, sugarcane	Lack of awareness on plant protection methods	Assessment of biological control of rhizome rot of turmeric in vertisol areas	OFT, Training, Group meeting was conducted
6.	Vanur Block Nalavoor	Groundnut, Tapioca, Banana Pulses,	Poor milk yield and lack of easy mineral supplementation methods	Assessment of GRAND supplement in cross bred dairy cows	OFT, Training
7.	Mailam Block Kattusiviri	Rice, Groundnut Pulses, sesame, Flowers	Poor growth rate in sheep & goats due to worm burden	Assessment of antihelmintics incorporated mineral block (AIM) in sheep and goat	OFT, Trainings
8.	Kallakurichi Block Thavadipattu	Rice, Turmeric, Tapioca, groundnut, sugarcane	Lack of awareness on new release and alternate variety for late samba and seed availability	Popularization of TFL seed production in newly released paddy in farmer participatory approach (Paddy ADT (R) 49) in SRI System	FLD, Trainings, Technology material on seed production technologies in paddy was prepared. Message given to extension functionaries in the monthly zonal workshop. Seed production in instructional farm taken up during 2012-13.
9.	Thiruvannainallur, Thiruvannainallur Block	Paddy, Sugarcane	Low yield and Lack of awareness about the general attributes of the	Popularization of Rice CO 50 under SRI method, ecofriendly pest	FLD, Trainings, Message given to extension functionaries

			new release	management and TFL seed production.	in the monthly zonal workshop. Feedback provided by farmers in the State Level Farmers Interaction Meet held at TNAU, Coimbatore on 28.2.2012
10.	Alankuppam, Marakkanam Block	Sugarcane, Groundnut, Watermelon, Muskmelon	Lack of adoption of hybrid	Introduction and popularization of Maize hybrid CO 6	FLD, Trainings, Method demonstration, Group meeting conducted.
11.	Thirunavallur Block Oliyampalayam	Paddy, Sugarcane Pulses	Low yield, growing of older varieties and adoption of conventional methods of cultivation	Seed production and popularization of integrated crop management practices in Blackgram VBN 6	FLD, Trainings, Method demonstration on post emergence herbicide application taken up. Message given to extension functionaries in the monthly zonal workshop. Seed production in instructional farm taken up during 2012-13
12.	Kandamangalam Block V. Mathoor	Banana, Rice, Pulses, Sugarcane	Non adoption of new variety and lack of ICM approaches; lack of awareness on seed production	Seed production and integrated crop management practices in Green gram VBN 3	FLD, Trainings, Method demonstration arranged. Group meeting conducted.
13.	Chinnasalem Block Poosapadi	Rice, Groundnut Pulses, sesame, Flowers	Low yield, Growing of traditional varieties and adoption of conventional methods of cultivation; no proper seed production and seed chain	Introduction of HYV, seed production in participatory mode and integrated crop management practices in groundnut var.CO 6	FLD, Trainings, Method demonstration on seed drill sowing and bio-fertilizer seed treatment application were taken up. Message given to

			management		extension functionaries in the monthly zonal workshop.
14.	Marakkanam and Mailam Block	-	Continuous use of old variety of mushroom; need to crop productivity; lack of knowledge about processing and value addition	Popularization of <i>Tricholoma giganteum</i> CO (TG) T3 mushroom	FLD, Trainings, Demonstrations. The spawn is to be made available by the University.
15.	Marakanam Block Marakanam	Rice, Coconut	Yield reduction due to salinity problem, poor permeability, fluffiness and soil crusting on surface, water logging leading to poor plant stand and yield	Technology for saline soil management	FLD, Trainings, Method demonstration conducted. Group meeting conducted. Feed back provided by the farmers during ATMA training programme.
16.	Rishivanthiyam Sankarapuram blocks Reddiyar palayam, Nedumanoor	Rice Turmeric Sugarcane, onion	No knowledge about the cultivation technology; lack of awareness about the market potential for the released variety	Integrated crop management practice in CO 5 onion (Small Onion)	FLD, Trainings, Method demonstration on seed treatment with <i>P. fluorescens</i>
17.	Vallam Block Vallam	Rice, Sugarcane, Groundnut, Vegetables	Non availability of quality seeds Low yield because of non adoption of improved technology	Integrated crop management in chilli hybrid – CO (CH) 1	FLD, Trainings, Method demonstration on portray sowing and demo on seed treatment with <i>P. fluorescens</i>
18.	Marakanam Block Veperi, Alankuppam	Rice, Vegetables	Improper nutrition management, non adoption of mulching and low yield	Integrated crop management practices in watermelon	FLD, Trainings, Conducted demo on use of bio inoculants and mulching for water conservation
19.	Mailam Block	Rice, Groundnut	Lack of awareness on	Biological control of wilt	FLD, Trainings, Method

	Kattusiviri	Pulses, sesame, Flowers	plant protection methods	in jasmine	demonstration organized; disease diagnosis and management methods imparted
20.	Vallam Block Vallam	Rice, Sugarcane, Groundnut, Pulses, Vegetables	Trained labour shortage during critical periods of crop growth. Extended period of sowing leading to poor germination and low population Lack of harvester and labour availability during harvesting resulting in loss to harvestable produce	Mechanization in blackgram cultivation	FLD, Trainings, Demonstrated seed drill sowing and combined harvesting in participation.
21.	Mailam Block Agoor	Rice, Sugarcane, Groundnut, Pulses, Vegetables	Moisture stress at critical stages of crop due to erratic monsoon Run-off problem during peak monsoon period	Moisture conservation practices for rainfed groundnut	FLD, Trainings, and method demonstration
22.	Mailam Block Chendoor Olakoor Block Panchalam	Rice, Sugarcane, Groundnut, Pulses, Vegetables	Low farm income; poor soil fertility management; lack of enterprise diversification; poor technology integration and management; poor nutrient use efficiency; lack of mainstreaming of gender in agriculture properly	Integrated Farming System	FLD, Trainings, demonstration of different components



**b) Target and achievements of mandatory activities**

<b>OFT</b>				<b>FLD</b>			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
7	7	45	45	15	15	184	169
<b>Training</b>				<b>Extension Programmes</b>			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
107	289	2040	6967	15	56	1000	1628
<b>Seed Production (Qtl.)</b>				<b>Planting materials (Nos.)</b>			
Target		Achievement		Target		Achievement	
70		76.81		5000		5000	
<b>Livestock, poultry strains and fingerlings (No.)</b>				<b>Bio-products (qtl)</b>			
Target		Achievement		Target		Achievement	
-		20		-		120	

**c) Major outcome of Technology Assessment and Refinement (in bullet form only)**

- 1. Assessment of weed management in drought tolerant paddy Anna 4**
  - ❖ Pre-emergence herbicide application of pertilachlor (S) 0.45kg/ha on 3 DAS + Post-emergence herbicide application of bispyribac@35ml/ha on 15-20 DAS(3 leaf stage) effectively controlled the weed population in paddy Anna 4
  - ❖ Weed incidence was reduced upto 40% in above.
  - ❖ The highest yield of 2.84 t/ha with a BCR of 3.02 was obtained.
  - ❖ In direct sowing method the plant stand needs to be optimized as per the feedback of the farmers.
  
- 2. Assessment of suitable varieties for transplanted redgram in Villupuram district**
  - ❖ Transplanting of redgram gave increased yield
  - ❖ Crop establishment rate was high and farmers could achieve the predicted yield
  - ❖ LRG 41 was observed to be the choice cultivar for transplanting method and gave the yield of 1210 kg/ha with BCR of 2.47.
  - ❖ The technology is labour intensive and has to be integrated with microirrigation to achieve greater yields.
  
- 3. Assessment of sulphur oxidizing bacterial inoculants in groundnut for enhanced uptake of nutrient**
  - ❖ Seed treatment of SOB + Rhizobium @ 1 kg/ha + *Pseudomonas* @ 10 g/kg + *Trichoderma viride* @ 4 g/kg; Soil application of SOB @5 kg/ on 45 DAS during earthing up+Gypsum application @200 kg/0.5 ha has increased the yield in groundnut (18.9 q/ha) over farmers practice of 17.2 q/ha.
  - ❖ Yield increase was upto 7% in seed treatment with rhizobium + *Trichoderma* + *Pseudomonas*, whereas 10% in SOB treatment
  - ❖ The shelling percentage was higher in SOB treatment (72.8%).
  
- 4. Assessment of biological control of rhizome rot of turmeric in vertisol areas**
  - ❖ Rhizome treatment with *Trichoderma viride* + *Pseudomonas fluorescens* pfl @10g /kg of rhizome + Soil application of *Trichoderma viride* + *Pseudomonas fluorescens* Pfl @10g /kg of FYM at first earthing up operation effectively controlled the rhizome rot in turmeric. The yield obtained was 276 q/ha compared to farmers method (205 q/ha).
  - ❖ The disease incidence was low in biocontrol method (4%) compared to farmers method (17%).
  - ❖ Virulent strains of the biopesticides with enhanced shelf life are required. A suitable method for rhizome treatment removing the existing drudgeries is required.
  
- 5. Assessment of GRAND supplement in cross bred dairy cows**
  - ❖ TANUVAS GRAND supplement with feeding of gruel and dry+fresh fodder increased the milk yield by 5 to 6% with BC ratio of 2.70 compared to conventional feeding of gruel and dry+fresh fodder alone.

**d) Major outcome of Frontline Demonstrations (in bullet form only)**

- ❖ Popularization of TFL seed production in newly released paddy ADT 49 through farmer participatory approach attained the highest yield of 8.13 t/ha by SRI method which is 26.64% higher than the check. Farmer produced seeds are made available for horizontal spread.
- ❖ Popularization of Rice CO (R)50 under SRI method showed increased yield (7.54t/ha) and increase of 14.59% above the conventional method. Farmer produced seeds are made available for horizontal spread.
- ❖ Technology for saline soil management by insitu green manuring and gypsum application in TRY 3 paddy recorded an yield of 6.73t/ha which is 22.81% higher than the conventional method of cultivation.
- ❖ In Blackgram VBN 6, seed production along with ICM practices showed a higher yield of 1328 kg/ha which was 11.9 % higher than the check. The farmer produced seeds are available for uptake.
- ❖ Mechanization in blackgram cultivation, recorded the highest yield of 1480kg/ha as against 830 kg/ha in conventional method.
- ❖ Seed production and integrated crop management practices in Green gram VBN 3 recorded the highest yield of 1280 kg / ha.
- ❖ In groundnut var.CO 6 along with seed production and ICM recorded a highest yield of 2.54t/ha which was 20.6% higher than the check.
- ❖ Moisture conservation practices for rainfed groundnut, the usage of water was reduced by 15% and the yield was increased upto 7.5%. The maximum yield recorded was 1780 kg/ha under rainfed conditions.
- ❖ Maize hybrid CO 6 showed the highest yield of 75.4q/ha which was 23.87 % higher than the check.
- ❖ ICM in CO 5 onion (Small Onion) lead to an increased yield of 18.6% (14.13t/ha) compared with the existing ruling cultivars.
- ❖ Integrated crop management in chilli hybrid CO (CH) 1- showed an yield increase upto 12% (176 q/ha) compared with the existing ruling private entries.
- ❖ Integrated crop management practices in watermelon in water stressed condition, the yield increase was noticed upto 25% (37t/ha) higher than the check.
- ❖ In biological control of wilt of jasmine, the disease incidence was reduced to 5% in the farmers field when biofortified FYM was applied followed by ICM practices.

e) Details of Training Programmes conducted (2012-13)

Category	Major thematic areas covered	No. of courses	No. of participants
Farmers and farm women	Weed Management, Resource Conservation Technologies, Crop Diversification, Seed production, Integrated Crop Management, Integrated Nutrient Management, Production of low value and high volume crop, Nursery raising, Training and Pruning, Production and Management technology in horticulture crops, Soil fertility management, Integrated nutrient management, Animal Nutrition Management, Post Harvest Technology, Integrated Pest and disease Management, Capacity Building and Group Dynamics	118	2471
Rural youth	Nursery Management of Horticulture crops, Protected cultivation, seed production, vermiculture, diagnosis of pest and disease, dairy, sheep and goat rearing	10	155
Extension personnel	Productivity enhancement in field crops, Integrated Pest Management, Integrated nutrient Management, Protected cultivation, Sensitization training to ATMA functionaries, Newer molecules of agrochemicals in agriculture, Hitech horticulture production, Livestock feed and fodder production	15	1015
Sponsored programmes	Crop production and management, drip fertigation, Precision farming, SSI	47	2016
Vocational programmes	Value addition, Income generation activities - Vermi-composting, Seed production, mushroom cultivation, Nursery, grafting	14	165
<b>Total</b>		161	4262

**f). Extension Programmes conducted**

- On farm testing
- Front line demonstrations
- Advisory Services
- Diagnostic Visits and animal health camps
- Method Demonstration and Exhibition
- Exposure Visits
- Field Day
- Workshop
- On campus trainings
- Off campus trainings
- Vocational trainings
- Sponsored Training
- Trainings to Extension Functionaries
- Training to rural youth
- Farmers field school

**g). Major extension activities (2012-13)**

Extension Activity	No. of activities	Participants		
		Farmers	Extension Functionaries	Total
Advisory Services	543	903	14	917
Animal Health Camp	2	150	3	153
Diagnostic Visits	85	421	36	457
Exhibition	18	2506	24	2530
Exposure Visits	17	1447	0	1447
Farmers Visit to KVK	543	903	0	903
Field Day	17	618	8	626
Method Demonstration	17	436	12	448
Workshop	5	254	9	263
<b>Total</b>	<b>1247</b>	<b>7638</b>	<b>106</b>	<b>7744</b>

**Major extension activities (2013-14)**

Extension Activity	No. of activities	Participants		
		Farmers	Extension Functionaries	Total
Advisory Services	51	176	7	183
Exhibition	8	1243	28	1271
Farmers Visit to KVK	47	361	29	390
Method Demonstration	5	510	11	521
Field vist	67	563	9	572
<b>Total</b>	<b>178</b>	<b>2853</b>	<b>84</b>	<b>2937</b>

**h). Other extension activities (2012-13)**

<b>Particulars</b>	<b>Number</b>
Animal health camps	2
Booklets	1
Electronic media	1
Extension Literature	17
Leaflets/folders	6
News paper coverage	6
Popular articles	4
Radio Talks	11
Technical Articles	2
Technical Bulletins	1
Technical Reports	14
TV talks	11
<b>Total</b>	<b>76</b>

**Other extension activities (2013-14)**

<b>Particulars</b>	<b>Number</b>
News paper coverage	11
Popular articles	1
Radio Talks	5
TV talks	9
<b>Total</b>	<b>26</b>

**i). Production and supply of technology products**

<b>Category</b>	<b>Major crops /livestock/fisheries strains / bio-products produced and supplied</b>	<b>Quantity</b>	<b>Value (Rs.in lakh)</b>	<b>Number of farmers</b>
Seed Materials –Varieties (Quintal)	Paddy ADT 49	2538 kg	55836	2
	Paddy CO 50	1076 kg	23672	-
	Groundnut TMV 13 (TFL)	1000 kg	70000	400 Kg - Virinjipuram 320 Kg- NICRA village 40 Kg -Mitranekeethan KVK Trivandrum 80 kg to Hulkoti KVK
	Groundnut TMV 13 (BS)	1741	124634	Supplied to state seed farm
	Gingelly TMV7	331	23170	49
	Blackgram VBN 4	20	1400	3
	Blackgram VBN 5	190	14250	Supplied to state seed farm

	Blackgram VBN6	132	9240	
	Blackgram VBN 7	323	22610	11
	Greengram CO6	117	8775	Supplied to state seed farm
	Greengram VRM 1	213	14910	
Planting Materials – Varieties (Number)	Mango - Alphonso Bangalora, Banganapalli Himahudin Neelun Sendura	5000	175000	480 Nos. supplied to DDH of Villupuram & 11 Nos to farmers
Livestock Materials (Number)	Telicherry	25 Nos	129040	10
Bio Products (kg)	Vermicompost	12 tonnes	60000	Internal farm use

#### j).Convergence and linkages

S. No.	Organization	Type of linkages
1	State Department of Agriculture	Joint implementation, participation in meeting, diagnostic visits, ATMA programme activities, R-E-F linkage and sensitization programmes, joint exhibition, SWIC programmes of World Bank State Level Tender programmes
2	State Department of Horticulture	Joint implementation, mentoring services. Diagnostic services, DMIC Member, NHM programme implementation, Tribal welfare programmes, joint exhibitions, inspections
3	Department of Animal Husbandry	Joint implementation in KVK programme
4	Seed certification	Human resource development, certification work in instructional farm, resource persons, farmers facilitation
5	Lead Bank	Conducting training programmes for identified functionaries
6	NABARD	Sponsored programmes, conducting training programmes, sensitization and capacity building programmes to FC
7	Rural Development Department	Sensitization on water conservation
8	Department of Agriculture Engineering	Joint implementation, Deevanur Tank programme, natural resource management
9	IFGTB, Coimbatore	Joint implementation of agroforestry

10	Dhanuka Agritech Ltd., Salem	Seed health programmes
11	UPL, Chennai	Balanced use of fertilizers
12	Jain Irrigation Systems Ltd., Villupuram	Microirrigation management
13	John Deere Ltd., Villupuram	Microirrigation management
14	Hand in Hand, Tindivanam	Organising and participating in training
15	BWDA, Villupuram	Organising and participating in training
16	SCAWD, Villupuram	Organising and participating in training
17	Kalvi Kendra, Villupuram	Organising and participating in training
18	SPEED(Society for People Education and Economical Development)	Organising and participating in training
19	Kurinji Mahalir SHG, Veerapandi	Millet value addition
20	MDPU, TN-IAMWARM	Joint implementation and convergence with other departments
21	District Collectorate	Agricultural Productivity Council programmes, Farmers Grievance redressal, World Bank programmes

**k). Soil Water and Plant Analysis**

Category	No. of samples		No. of farmers	No. of villages	Amount realized (Rs.)
	Farmers in which OFT/FLD were implemented during the reported period	Other Farmers			
Soil	21	104	125	73	3125
Water	-	62	62	34	620
Total	21	62	187	107	3745



**I). Human Resources Development**

<b>S. No</b>	<b>Name of the Staff</b>	<b>Number of training programmes attended</b>	<b>Institutions under which trained</b>	<b>Major areas of knowledge gained</b>	<b>Programmes planned based on knowledge gained</b>
1	Dr. N. Sathiah	1	TNAU, Coimbatore	To gain knowledge on Commodity level markets	SMART Rural Technocrat Initiative in Villupuram Dt.
2	Dr. K. Natarajan	1	TNAU, Coimbatore,	Contract farming for sustainable agriculture	Knowledge on Agricultural inputs availability in public and private enterprises
3	Dr. K. Natarajan	1	Dept. of Agriculture, Karur	Action plan preparation for district level	Proper Planning and monitoring
4	Dr.K. Senthamizh	1	TNAU, Coimbatore	To gain knowledge on natural available resources	Knowledge on efficient use of locally available resources
5	Dr. K. Kavitha	1	DSR, Hyderabad	Post harvest technologies of sorghum/millets	Product development technologies from sorghum
6	Dr. V. Sendhilvel	1	CRIDA, Hyderabad	Weather forecasting	Pest and disease forewarning

**m). Action Plan in brief for the next season(s)**

<b>S. No</b>	<b>Name of the Operational Village</b>	<b>Crop/Enterprise</b>	<b>Major problems faced</b>	<b>Thrust areas identified to tackle the problems</b>	<b>Nature of interventions proposed to be implemented *</b>
1.	Chittampoondi, Gingee Block.	Groundnut, paddy	Need for alternate confectionary groundnut variety with short duration characteristics as replacement for existing oil bearing variety and confectionery variety Supply-demand gap of agricultural labourers during critical period affecting the productivity of the crop Focus on oil bearing varieties in the extension system Unexploited Absence of PPP mode and weak SHG	Assessment of confectionary groundnut varieties in Villupuram district	OFT, Trainings (on/off campus), rural youth, demonstrations, group discussion
2.	Nannadu, Koliyanur Block	Banana, Sugarcane, Paddy	Intense competition of weeds for moisture and nutrition in the drip irrigation and fertigation system Non availability of labour for weeding Absence of mechanization in weeding Non availability of mulching technology.	Assessment of hi-tech methods in banana for weed management and moisture conservation	OFT, Training(on/off campus, Demonstrations, group discussion
3.	Olakkur , Olakkur Block	Paddy, Pulses, Jasmine and Gourds	Lack of uptake of micronutrient Flower quality is poor and unable to market at affordable	Assessment of foliar nutrition in jasmine for improving the	OFT, Training(on/off campus, Demonstrations, group discussion

			price Loss due to sorting Malformed flowers 25-37 g/kg of harvested flowers Budworm and midge affected flowers 10-15g/kg of harvested flowers Reduction in marketability	flower quality	
4.	Ariyalur Thirukai, Kanai Block	Sugarcane, Groundnut, Pulses	Reduced germination of sugarcane chip buds resulting in lower profit/even loss for the nursery entrepreneurs Reduced turnover from the nursery Mismanagement of labour	Assessment of germination improvement of chip buds in sugarcane under SSI	OFT, Training(on/off campus, Vocational training, Demonstrations, group discussion
5.	Thiruvonnainallur, Thiruvonnainallur Block	Paddy, Sugarcane	Replacement of long duration variety for the existing ruling cultivar CR1009 Requirement of medium slender rice with long duration in paddy production system Susceptibility of CR1009 & BPT5204 for pests and diseases	Introduction of newly released paddy ADT(R) 50 in SRI system and value chain management in Villupuram District	FLD, Training(on/off campus), rural youth, demonstrations, Field days, group discussion
6.	Thiruvonnainallur, Thiruvonnainallur Block	Paddy, Sugarcane	Rapid spread of blast fungus in extensive areas of the district Reduction in yield	Popularization of ecofriendly management practices for blast and sheath blight in paddy	FLD, Training Training(on/off campus), rural youth, demonstrations, group discussion
7.	Veerapandi, Thirukoilur Block	Groundnut, Paddy, Bajra	Recurrent drought in rainfed situation Requirement of short duration	Popularization of bajra hybrid Co (Cu) 9 for rainfed	FLD, Training(on/off campus, demonstrations, Field days, group

			hybrid replacement of ICRISAT composite No knowledge about post harvest processing and value addition	conditions	discussion
8.	Nolambur, Olakkur Block	Paddy, Groundnut, Pulses and vegetables	Decline in area under cultivation due non availability of labour for critical operations in time. Increased labour cost and shrinking income per unit area Difficulties in utilization of available moisture for sowing Difficulties in harvesting	Popularization of mechanization in irrigated Groundnut	FLD, Training(on/off campus, demonstrations, Field days, group discussion
9.	Athur, Marakkanam Block	Sesame, Groundnut	Requirement of all season variety with high oilcontent and tolerant to biotic stress	ICM in sesame TMV 7 and seed production	FLD, Training(on/off campus, demonstrations, Field days, group discussion
10.	T.Orathur, Thirunavalur Block	Pulses, paddy, Sugarcane	Requirement of short duration variety over the existing variety VBN 4 Farmer needs for short duartion variety for sugarcane cultivation system Recurrent incidence of leaf crinkle virus	Seed production and popularization of integrated crop management practices in Blackgram VBN 7	FLD, Training(on/off campus, demonstrations, Field days, group discussion
11.	Olakkur, Olakkur Block	Paddy, Pulses, Jasmine and Gourds	Need for university release cowpea with long pods Lack of awareness about cultivation	Popularization of PKM1 Vegetable cow pea in Gingee belt	FLD, Training(on/off campus, demonstrations, Field days, group discussion
12.	Olakkur, Olakkur Block	Paddy, Pulses, Jasmine and Gourds	Non availability of improved and performing variety Non availability of quality	Integrated approach in successful coccinia cultivation	FLD, Training(on/off campus, rural youth, demonstrations, Field

			planting materials Poor rate of adoption of ICM practices Absence of grading at farm gate	in peri-urban horticulture production system	days, group discussion
13.	Alankuppam, Marakkanam Block	Sugarcane, Groundnut, Watermelon, Muskmelon	Lack of knowledge on integrated crop management technologies Yield reduction due to downy mildew disease	ICM in muskmelon with emphasis on downy mildew management	FLD, Training(on/off campus, demonstrations, Field days, group discussion
14.	Panapakkam, Kolianur Block	Guava, Tapioca, Rice	Unseasonal and improper pruning Flood irrigation leads excess water usage Unhygienic Orchard maintenance Over reliance on DAP for quality Preponderance of pest and disease	ICM in Guava Orchard for maximization of income	FLD, Training(on/off campus, demonstrations, Field days, group discussion
15.	Nolambur, Olakkur block	IFS	Deterioration of soil health coupled with less farm income due to failure of monsoon and escalated cost of external inputs.	Popularization of IFS for gardenland production system in Villupuram District	FLD, Training(on/off campus, extension functionaries and vocational training, demonstrations, Field days, group discussion



**n). Revolving Fund Status**

Year	Opening balance as on 1 <sup>st</sup> April of previous year	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of current year
2010-11	4,84,822	5,16,331	8,65,575	1,35,578
2011-12	1,35,578	12,69,297	7,61,194	6,43,681
2012-13	6,43,681	7,67,889	12,90,289	1,21,281

**o). Utilization of KVK funds during the previous Year 2012-13 (Rs. in lakh)**

S. No.	Particulars	Sanctioned	Released	Expenditure
<b>A. Recurring Contingencies</b>				
1.	<b>Pay &amp; Allowances</b>	<b>67,00,000</b>	79,00,000	7592033
2.	<b>Traveling allowances</b>	<b>1,00,000</b>		99971
3.	<b>Contingencies</b>			
a.	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	265000		264924
b.	POL, repair of vehicles, tractor and equipments	175000		175000
c.	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	60000		60000
d.	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	60000		60000
e.	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	370000		369332
f.	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	35000		33749
g.	Training of extension functionaries	25000		25000
h.	Maintenance of buildings	40000		40000
i.	Extension activities	40000		40000
j.	Farmers Field School	25000		25000
k.	Library (Purchase of Journal, News paper & Magazines)	5000		5000
l.	Total (Contingencies)	<b>11,00,000</b>		<b>10,98,005</b>
<b>TOTAL (A)</b>		<b>79,00,000</b>		<b>87,90,009</b>
<b>B. Non-Recurring Contingencies</b>		-	-	-
<b>TOTAL (B)</b>		-	-	-
<b>GRAND TOTAL (A+B)</b>		<b>79,00,000</b>		<b>87,90,009</b>

**Utilization of KVK funds during the Current Year (Rs. in lakh)**

<b>S. No.</b>	<b>Particulars</b>	<b>Sanctioned</b>	<b>Released</b>	<b>Expenditure</b>
<b>A. Recurring Contingencies</b>				
1.	<b>Pay &amp; Allowances</b>	60,00,000		21,07,190
2.	<b>Traveling allowances</b>	1,75,000		
3.	<b>Contingencies</b>			
a.	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2,50,000		51233
b.	POL, repair of vehicles, tractor and equipments	2,10,000		14639
c.	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	90,000		
d.	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	80,000		
e.	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	3,70,000		
f.	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	70,000		
g.	Training of extension functionaries	25,000		
h.	Maintenance of buildings	70,000		
i.	Extension activities	50,000		
j.	Farmers Field School	30,000		
k.	Library (Purchase of Journal, News paper & Magazines)	5,000		
l.	Total (Contingencies)	<b>12,50,000</b>		<b>65872</b>
<b>TOTAL (A)</b>		<b>74,25,000</b>		<b>2173062</b>
<b>B. Non-Recurring Contingencies</b>		-	-	-
<b>TOTAL (B)</b>		-	-	-
<b>GRAND TOTAL (A+B)</b>		<b>74,25,000</b>		<b>2173062</b>



## Agenda Item No.05

### Salient achievements in detail

S. No.	Title	Problem identified	Technology Intervention Undertaken	Mode of Implementation	Outcome	Action for up-scaling / recommendation of the outcome
1.	Assessment of weed management in drought tolerant paddy Anna 4	Lack of awareness on the use of the newer weedicides Lack of awareness on the chemical control measure of the weeds	Farmers practice- Hand weeding <u>Technology option 2:</u> Pre-emergence herbicide application of pendimethalin 1 kg a.i./ha on 3 DAS + post-emergence herbicide azimsulfuron 50 DF 35g/ha on 20 DAS + Hand weeding on 45 DAS <u>Technology option 3:</u> Pre-emergence herbicide application of pertilachlor (S) 0.45kg/ha on 3 DAS + Post-emergence herbicide application bispyribac@35ml/ha on 15-20 DAS(3 leaf stage)	OFT	Weed control efficiency- 87% Yield: 28.40 q/ha BCR -3.02 Pre-emergence herbicide application of pertilachlor (S) 0.45kg/ha on 3 DAS + Post-emergence herbicide application bispyribac@35ml/ha on 15-20 DAS(3 leaf stage) effectively controlled the weed population in paddy Anna 4. The use of labour was limited	During Kharif and Rabi 2013 it is planned to increase the awareness through extension programmes involving Extension Functionaries
2.	Assessment of suitable varieties for transplanted redgram in Villupuram district	Use of short and medium duration varieties for transplanting methods are not suitable	<u>Technology option 1:</u> Delaying in seedling production in poly bag (Co (Rg)7) and planting in main field <u>Technology option 2:</u>	OFT	No. of Pods/plant: 148 Yield:12.10q/ha BCR: 2.47 Seedling production in polybag of redgram (LRG 41) and planting in main	Trainings to Extension personnel and farmers, Demonstrations

		Highly damaged due to heavy and continuous rain The pest and disease incidence are more during pod development and maturity stage (November – December).	Seedling production in poly bag of redgram (LRG 41) and planting in main field <u>Technology option 3:</u> Seedling production in poly bag of redgram (BSMR-736) and planting in main field		field is effective. The method is labour intensive and cannot be practiced using polbag technology	
3.	Assessment of sulphur oxidizing bacterial inoculants in groundnut for enhanced uptake of nutrient	Lack of awareness on adopting biofertilizers	<u>Technology option 1:</u> Farmers practice- Nil <u>Technology option 2:</u> RDF+Seed treatment with rhizobium @ 1 kg/ha + <i>Pseudomonas</i> seed treatment @ 10 g/kg + <i>Trichoderma viride</i> @ 4 g/kg <u>Technology option 3:</u> Seed treatment of SOB + Rhizobium @ 1 kg/ha + <i>Pseudomonas</i> @ 10 g/kg + <i>Trichoderma viride</i> @ 4 g/kg; Soil application of SOB @5 kg/ on 45 DAS during earthing up+Gypsum application @200 kg/0.5 ha	OFT	No. of nodules per plant : 70 No. of plants/m <sup>2</sup> : 33 Yield: 18.9 BCR: 1.58. Seed treatment of SOB + Rhizobium @ 1 kg/ha + <i>Pseudomonas</i> @ 10 g/kg + <i>Trichoderma viride</i> @ 4 g/kg; Soil application of SOB @5 kg/ on 45 DAS during earthing up+Gypsum application @200 kg/0.5 ha has increase the yield in groundnut. The results are spectacular in SOB plots. The availability is the key.	Trainings to Extension personnel and farmers, demonstrations .
4.	Assessment of biological control of rhizome rot of turmeric in	Lack of awareness on plant protection methods	<u>Technology option 1:</u> Farmers Practice <u>Technology option 2:</u> Rhizome treatment with	OFT	Disease incidence : 5% Yield: 276 q/ha BCR: 3.18Rhizome treatment with <i>Trichoderma</i>	The ATMA functionaries and farmers of vertisol areas will be trained under R-

	vertisol areas		<p><i>Trichoderma viride</i> + <i>Pseudomonas fluorescens</i> pfl @10g /kg of rhizome + Soil application of <i>Trichoderma viride</i> + <i>Pseudomonas fluorescens</i> Pfl @10g /kg of FYM at first earthing up operation</p> <p><u>Technology option 3:</u> Rhizome treatment with <i>Trichoderma harzianum</i> IISR-P26 + <i>Pseudomonas fluorescens</i> IISR-6 @10g /kg of rhizome + Soil application of <i>Trichoderma harzianum</i> IISR-P26 + <i>Pseudomonas fluorescens</i> IISR-6 @10g /kg of FYM at first earthing up</p>		<p><i>viride</i> + <i>Pseudomonas fluorescens</i> pfl @10g /kg of rhizome + Soil application of <i>Trichoderma viride</i> + <i>Pseudomonas fluorescens</i> Pfl @10g /kg of FYM at first earthing up operation effectively controls the rhizome rot in turmeric</p>	E-F linkage programmes during 2013-14 for uptake.
5.	Assessment of GRAND supplement in cross bred dairy cows	<p>Imbalance nutrition</p> <p>Non availability of mineral mixture</p> <p>Disease incidence</p> <p>Low economic returns</p>	<p><u>Technology option 1:</u> Open grazing</p> <p><u>Technology option 2:</u> Feeding of gruel and gram husk</p> <p><u>Technology option 3:</u> Feeding of GRAND supplement @20 ml/cow daily along with gruel and gram husk</p>	OFT	<ul style="list-style-type: none"> <li>•Milk yield-4.65 litres/day/animal</li> <li>•BCR-2.70</li> </ul> <p>TANUVAS GRAND supplement increased the milk yield by 5 to 6%</p>	Trainings to Extension personnel and farmers, Demonstartions
6.	Popularization of TFL seed production in	Lack of awareness on new release and alternate variety	Introduction of new varieties , seed production	FLD	Popularization of TFL seed production in newly released paddy ADT 49	Trainings to Extension personnel and farmers

	newly released paddy through farmer participatory approach (Paddy ADT (R) 49)	for late samba	& ICM		through farmer participatory approach attained an average yield of 8.13t/ha by SRI method which is 26% higher than the check with BCR ratio of 2.37	TFL seeds are available with the farmers for area expansion. The traders will be sensitized on the character of variety as there is difficulty in purchase. Compact area production will be attempted as per the Mill requirement
7.	Popularization of Rice CO (R)50 under SRI method, ecofriendly pest management and TFL seed production	Low yield and Lack of awareness about the general attributes of the new release	Introduction of new varieties , seed production & ICM	FLD	Popularization of Rice CO (R)50 under SRI method showed a yield increase of 14.6% (an average yield- (7.54t/ha) compared to the conventional method with BCR ratio of 2.18.	Trainings to Extension personnel and farmers TFL seeds are available with the farmers for area expansion. The traders will be sensitized on the character of variety as there is difficulty in purchase. Compact area production will be attempted as per the Mill requirement
8.	Technology for saline soil management	Yield reduction due to salinity problem, poor permeability , fluffiness and soil crusting on surface, water logging leading to poor plant stand and yield	Crop & soil Management	FLD	Technology for saline soil management by insitu green manuring and gypsum application in TRY 3 paddy recorded an an average yield of 6.73t/ha which is 22.81% higher than the conventional method of cultivation with BCR ratio of 1.78.	-
9.	Seed production	Low yield,	Introduction of new	FLD	In Blackgram VBN 6, seed	Trainings to Extension

	and popularization of integrated crop management practices in Blackgram VBN 6	growing of older varieties and adoption of conventional methods of cultivation	varieties , seed production & ICM		production along with ICM practices showed an average yield of 1.33t /ha which was 11.6 % higher than the check with BC ratio of 2.17	personnel and farmers Seed production and distribution.
10.	Mechanization in blackgram cultivation	Trained labour shortage during critical periods of crop growth. Extended period of sowing leading to poor germination and low population Excess weed competition leading to poor crop growth Lack of harvester and labour availability during harvesting resulting in loss to harvestable produce	Mechanization in blackgram cultivation	FLD	Mechanization in blackgram cultivation, recorded an average yield of 1.23t/ha as against 0.830t/ha in conventional method with BC ratio of 1.67	Trainings to Extension personnel and farmers
11.	Seed production and integrated crop management practices in Green gram VBN 3	Non adoption of new variety and lack of ICM approaches; lack of awareness on seed production	Seed production and integrated crop management	FLD	Seed production and integrated crop management practices in Green gram VBN 3 recorded an average yield of highest yield of 1.03t / ha with BC ratio of 3.62	Trainings to Extension personnel and farmers Seed production and distribution
12.	Introduction of	Low yield,	Introduction of new	FLD	In groundnut var.CO 6	Buyback arrangement to

	HYV, seed production in participatory mode & integrated crop management practices in groundnut var.CO 6	Growing of traditional varieties and adoption of conventional methods of cultivation; no proper seed production and seed chain management	varieties , seed production & ICM		along with seed production and ICM recorded a an average yield of 2.16t/ha which was 20.6% higher than the check with BC ratio of 3.62.	be made in consultation with the Oilseeds Department for area expansion
13.	Moisture conservation practices for rainfed groundnut	Moisture stress at critical stages of crop due to erratic monsoon Run-off problem during peak monsoon period	Moisture conservation	FLD	Moisture conservation practices for rainfed groundnut, the usage of water was reduced by 15% and the yield was increased upto 7.5%. The an average yield recorded was 1.92t/ha under rainfed conditions with BC ratio of 1.92.	Trainings to Extension personnel and farmers
14.	Introduction and popularization of Maize hybrid CO 6	Lack of adoption of hybrid	Introduction of new hybrid	FLD	Introduction and popularization of Maize hybrid CO 6 showed an average yield of 7.36 t/ha which was 23.87 % higher than the check with BC ratio of 2.58.	Area expansion programmes in collaboration with the sister department to be carried out
15.	Integrated crop management practice in CO 5 onion (Small Onion)	No knowledge about the cultivation technology; lack of awareness about the market potential for the	Integrated crop management	FLD	ICM in CO 5 onion (Small Onion) lead to an increased yield of 18.6% (13.62t/ha) compared with the existing ruling cultivars with BC ratio of 2.72.	Trainings to Extension personnel and farmers

		released variety Lack of seed availability of released variety				
16.	Integrated crop management in chilli hybrid – CO (CH) 1	Non availability of quality seeds Low yield because of non adoption of improved technology	Integrated crop management	FLD	Integrated crop management in chilli hybrid CO (CH) 1- showed an yield increase upto 12% (17.3t/ha) compared with the existing ruling private entries with BC ratio of 2.59.	Trainings to Extension personnel and farmers
17.	Integrated crop management practices in watermelon in water stressed condition	Improper nutrition management, non adoption of mulching and low yield	Integrated crop management	FLD	Integrated crop management practices in watermelon in water stressed condition, the yield increase was noticed upto 25% (35.3t/ha) higher than the check with BC ratio of 3.10.	Trainings to Extension personnel and farmers
18.	Biological control of wilt of jasmine	Lack of awareness on plant protection methods	Biological control	FLD	In biological control of wilt of jasmine, the disease incidence was reduced to 5% in the farmers field when biofortified FYM was applied followed by sound ICM practices with an average yield of 4.5 t/ha and BC ratio 2.04	Trainings to Extension personnel and farmers

