Action Plan 2017-18 – Summary of Technical Activities

ICAR- KVK VELLORE

1. Address of KVK with Phone, Fax and e-mail, Website (Give district map and indicate the location of the KVK)

1.1	Name and address of KVK with Phone, Fax and e-mail	:	ICAR - Krishi Vigyan Kendra, Tamil Nadu Agricultural University, Virinjipuram-632 104, Vellore District. Phone: 0416-2914453/2273221 E-mail: kvkvrinjipuram@tnau.ac.in
1.2	Name and address of host organization	:	Tamil Nadu Agricultural University, Coimbatore-641 003. Phone No : 0422-6611201 Fax No : 0422-6611201 E-mail : registrar@tnau.ac.in Grams : FARMVAR
1.3	Year of sanction	:	2004
1.4	Website address of KVK and date of last update		www.kvkvellore.org and September 2016

2. Operational area / Cluster villages details

Taluk/ Block	Name of cluster villages	Major crops & Enterprises	Major problems identified in each crop / enterprise	Proposed type of interventions
K.V. Kuppam	Vaduganthangal	Groundnut	• Low productivity • Lack of Awareness on HYV • Non Availability of HYV for Rainfed Areas	FLD, Training
		Ragi	• Blast disease incidence ranges from 34.6 to 67.5 PDI • Yield reduction 14.14 to 27.58 % • Total crop loss under uncontrolled condition. • Unpredicted climatic variation influence the disease epidemic	FLD, Training
		Sheep/goat	• Weight Loss @ 6 month (6 kg instead of 9.3 kg) • Non Availability of Specific Mineral Mixture In Tamil Nadu • Economic loss due to Poor Fertility	FLD, Training
	Solamur Edapalayam	Oats	• High cost of green feed for cattle • Non availability of seeds • Non-availability of sufficient quantities of fodder • Drought during December and January, Heavy Winter • Non availability of Grazing Land	OFT, Training
		Dairy Cow	• High somatic cell count (Pop. 2 X 10 9 No./ml)Incidence of Subclinical Mastitis (32.6 – 37.8 %) • Poor Milk Quality (Microbial Contamination) • Poor Nutritional Management • Lack of Skill in Estrus detection • Poor Conception (42.3 %), Infertility (12 – 15.8 %)	FLD, Training
		Horsegram	• Non availability of HVY seeds • Low yield of existing variety	FLD, OFT, Training

Madhanur/ Anaicut	Ellappanpatti Palur Pallikuppam	Chilli	• Flower and Fruit Drop (32 – 41 %) • Curved Nature of Fruit- Poor Market Preference • Severe powdery mildew disease incidence • Less market preference due to light green colour and fruit Length	FLD, OFT, Training
		Papaya	• Papaya ring spot virus incidence ranges from 47.4 to 67.6 % • Total crop loss under uncontrolled condition • Incidence was higher during summer months. • Lack of skill for Induction of Immunity	FLD, Training
	Nadimenpalayam Ramanayanikuppam Gururajapalayam	Guava	• Tea mosquito bug damage 27.7 to 28.9 % ; Yield reduction 23- 31 % • Indiscriminate use of pesticide • Reduced market value	FLD, Training
Katpadi	Latheri	Jasmine	• No application of Micronutrients • Pink colour flowers due to boron deficiency • Yield gap (31.5%)	FLD, Training
Yelagiri	Nilavoor Yelagiri	Beans	• Poor Bean Yield (6.7 t/ha) • Non Availability of String-Less Variety • Root rot incidence is severe	FLD, Training
Arcot	Kalari Arunkundram	Rice	• Soil Salinity (1.0 – 2.6 dSm-1) • Low Yield (YG: 21.7 %) • Poor Tillering (Avg -23 Nos.)	OFT, Training
		Turmeric	• Rhizome rot incidence 26.5 to 38.7 % and pathogen load - 2.3 X 10^6 CFU /gm of Soil • Yield Reduction (20.3 -25.7 %) • Indiscriminate use of Fungicides	OFT, Training
		Traditional Rice	• Under utilization of traditional rice varieties • Therapeutic properties of traditional rice varieties not explored	OFT, Training

3. Details of technological interventions

3.1 Technology Assessment

S. No	Crop/ Enterprise	Title of intervention	Technology options	Source of Technology and year of release	No. of trials	Total cost for the intervention (Rs.)	Team members involved
1	Rice	Assessment of tolerant Rice varieties for salt affected areas of Vellore District	Option: 1 TRY 3	TNAU 2010	5	8,000	Dr.G.Anand Dr. S. Joshua Davidson Dr. V. Sendhilvel
			Option: 2 ADT 49	TNAU 2011			
			Option: 3 Dhan 39	DRR 2009			
2	Chilli	Assessment of Micronutrient Formulation Efficiency For Enhancing Yield and Quality in Chilli	Option: 1 Non application of Micronutrient	-	5	6,400	Dr.B.K.Savitha Dr.V.Sendhilvel Dr.S.Joshua Davidson
			Option: Vegetable Special @ 3 gram in 1 litre of water at 25-30 DAT and 2nd spray at 40-50 DAT and subsequent spray at every 20 days intervals	IIHR,2013			
			Option: 3 Spray of Power Mix @ 5 gm/lit at 45 DAT and at Full Bloom Stage	IISR, 2014			

3	Turmeric	Assessment of Bio-Inoculam Potential For Sustainable Management of Rhizome Rot in Turmeric	Option: 1 Drenching of 1.Ridomil@2g/lit of water 2.Carbendazim@500 gram/ha	-	5	10,750	Dr.V.Sendhilvel Dr.S.Joshua Davidson Dr.B.K.Savitha
			Option: 2 Rhizome treatment with *T. viride* and *P. fluorescens* each @10g /kg followed by soil application of *T. viride & P. fluorescens* each @2.5 kg/ha on basal & 150 DAP	TNAU, 2013			
			Option: 3 Rhizome treatment with *Trichoderma harzianum* @10g /kg followed by Soil application of *Trichoderma harzianum & Pochonia chlamydosporia* each 1kg/ton of FYM on basal & on 150 DAP	IISR, Calicut, 2015			
4	Fodder oats	Assessment of Fodder Oats For Green Fodder Supplementation Under Climate Resilient Condition	Option: 1 Open Grazing/Dry Fodder	-	5	6,400	Dr. P. Veeramani Dr. V. Sendhilvel Dr. S. Joshua Davidson Dr.G.Anand,
			Option: 2 Multicut Fodder Sorghum	(TNAU, 2013)			
			Option: 3 Multicut Fodder Oats	(IGFRI, Jhansi 2010)			
5	Livestock - cattle	Assessment of Ethno-Veterinary Preparations For Prevention of Subclinical Mastitis In Dairy Cow	Option: 1 Paste on udder with mixture of turmeric , lime and chalk	-	10	25,000	Dr. M. Ramasamy Dr. S. Joshua Davidson Dr.G.Anand
			Option: 2 Mastiguard - Teat Protect spray TANUVAS	TANUVAS, 2016			
			Option: 3 Herbal Teat Dip	GADVASU, 2014			

6	Paddy	Assessment of glycemic index of traditional paddy varieties	Option: 1 Milled Rice (CO 51/ BPT 5204)	TNAU	3	9,800	Dr.K.P.Sivakumar Dr. S. Joshua Davidson Dr. P. Veeramani
			Option: 2 Thuya malli	-			
			Option: 3 Arcot kichili samba	-			

3.2 Frontline Demonstrations

S. No.	Crop/ Enterprise	Prioritized problem	Technology to be demonstrated	Source of Technology and year of release	No. of Demo	Area (ha/ Units	Total cost for the Demo (Rs.)	Team members involved
1	Ragi	❖ Blast disease incidence ranges from 34.6 to 67.5 PDI ❖ Yield reduction 14.14 to 27.58 % ❖ Total crop loss under uncontrolled condition. ❖ Unpredicted climatic variation influence the disease epidemic	Demonstration of Ragi ML 365 variety against blast disease	UAS Bangalore 2009	10	4	8,000	Dr. P. Veeramani Dr. V. Sendhilvel Dr.G.Anand,
2	Horse gram	❖ Non availability of HVY seeds ❖ Low yield of existing variety	Demonstration of Climate Resilient Horsegram Variety CRIDA CRHG 6 for Vellore District to Combat Drought	CRIDA 2010	10	4	4,400	Dr.G.Anand Dr. P. Veeramani Dr. S. Joshua Davidson
3	Groundnut	❖ Low productivity ❖ Lack of Awareness on HYV ❖ Non Availability of HYV for Rainfed Areas	Demonstration of Groundnut Variety VRI 8 For Rainfed Areas of Vellore District	TNAU, 2016	5	2	36,000	Dr.P.veeramani Dr.G.Anand Dr. S. Joshua Davidson

4	Chilli	❖ Less market preference due to light green colour and fruit Length ❖ Severe powdery mildew incidence ❖ Yield gap (15-20%)	Demonstration of Chilli Hybrid Arka Haritha for powdery mildew tolerance and market value	IIHR (2010)	10	4	10,000	Dr.B.K.Savitha Dr.P.veeramani Dr.G.Anand
5	French Bean	❖Poor Bean Yield (6.7 t/ha) ❖ Non Availability of String-Less Variety ❖Root rot incidence	String Less French Bean Arka Sharath	IIHR 2013	10	4	24,500	Dr.G.Anand Dr. S. Joshua Davidson Dr. P. Veeramani
6	Papaya	❖ Papaya ring spot virus incidence ranges from 47.4 to 67.6 % ❖ Total crop loss under uncontrolled condition. Incidence was higher during summer months ❖ Lack of skill induction of immunity against virus	Demonstration of Papaya Ring Spot Virus Management	TNAU, 2013	10	4	12,600	Dr. V. Sendhilvel Dr. P. Veeramani Dr. S. Joshua Davidson
7	Guava	❖Damage 27.7 to 28.9 % ; Yield reduction 23- 31 % ❖ Indiscriminate use of pesticide ❖ Reduced market value ❖ Non availability of effective bio pesticide method	Demonstration of Eco Friendly Management Technique For Guava Tea Mosquito Bug	IIHR,2012	5	2	8,750	Dr. V. Sendhilvel Dr. P. Veeramani Dr. S. Joshua Davidson
8	Jasmine	❖No application of Micronutrients ❖ Pink colour flowers due to boron deficiency ❖ Yield gap - 31.5%	Integrated Crop Management in Jasmine For Improving the Flower Quality	TNAU, 2013	10	4	11,600	Dr.B.K.Savitha Dr.V.Sendhilvel Dr.S.Joshua Davidson

9	Livestock - Goat	❖ Weight Loss @ 6 month (6 kg instead of 9.3 kg) ❖ Non Availability of Specific Mineral Mixture In Tamil Nadu ❖ Economic loss due to Poor Fertility	Demonstration of Specific Mineral Mixture for the Growth of Kids/Lambs in Vellore District	NIANP, 2014	10	40 Nos	10,000	Dr. M. Ramasamy Dr. S. Joshua Davidson Dr.V.Sendhilvel
10	Livestock – Crossbred Cattle	❖ Poor Nutritional Management ❖ Lack of Skill in Estrus detection ❖ Poor Conception (42.3 %) ❖ Infertility (12 – 15.8 %)	Management of Anoestrum and Infertility in Crossbred Cattle	TANUVAS 2013	20	20 Nos	14,000	Dr. M. Ramasamy Dr. S. Joshua Davidson Dr.G.Anand
11	Value Addition	❖ Low shelf life of panner ❖ Bland flour of panner ❖ Lack of variety in panner	Demonstration of extension of Shelf life of paneer using herbs and spice	H.Sc & RI, 2016	10	-	7,100	Dr.K.P.Sivakumar Dr. S. Joshua Davidson Dr.M. Ramasami

4. Target for mandated activities for the year 2017-18

S.	**Activities**	**Target (2017-18)**
1.	On- farm trials (No. of technologies)	6
2.	Frontline Demonstrations (No.)	11
3.	Training of Farmers (Participants) Nos.	900
4.	Training of Extension Personnel (Participants in Nos.)	240
5.	Participants in Extension activities (in lakh)	1
6.	Production of Seed (in quintal)	5
7.	Planting material (Nos.)	25000
8.	Live-stock strains/ fingerlings (Nos)	5
9.	Kisan Mobile Advisory (KMA) (lakh farmers)	0.7
10.	Soil and Water Testing (samples in Nos)	1250

5. Special Activities (NMOOP, NFSM, Skill Development, FFS, IFS, EDP etc.)

Activity or Programme	Physical details (no. of programmes, participants, area etc.)	Financial outlay (Rs.lakh)	Team members involved
Cluster Front Line Demonstration of Blackgram variety VBN 8 (NFSM)	12 hectare (30 Demonstrations)	0.70	Dr. V. Sendhilvel Dr. P. Veeramani Dr. S. Joshua Davidson
Cluster FLD on Oilseed (Groundnut) (NMOOP)	10 hectare (25 Demonstrations)	3.05	Dr.G.Anand, SMS (Ext.) Dr. P. Veeramani Dr. S. Joshua Davidson
Entrepreneurship development in value addition of minor millets	• Preparation method of cookies, cake, bread and bun • Preparation of instant mix products • Methods of Packaging • Demonstration to the Farmer Interaction Group's	0.30	Dr. K.P Sivakumar Dr. S. Joshua Davidson Dr. P. Veeramani
Special Programme Value chain management in mango	• No. of programme – 05 • No. of farmers – 05 • Area – 2 ha	0.50	Dr. K.P Sivakumar Dr. S. Joshua Davidson Dr. P. Veeramani

6. Externally funded Activities (continuing / expected during 2017-18):

Activity or Programme	Program duration	Funding agency	Physical details (no. of programmes, participants, area etc.)	Financial outlay (Rs.lakh)	Team members involved
Pre *Kharif* 2017	One day	ICAR	500 Farmers	0.80	PC & All SMS
Pre Rabi 2017-18	One day	ICAR	500 Farmers	0.80	PC & All SMS
World soil day	One day	ICAR	100 Farmers	0.50	PC & All SMS

7. SAC meeting month: 2nd fortnight of Sep' 2018

Programme Coordinator
ICAR- KVK, Virinjipuram