ICAR - Krishi Vigyan Kendra

(Host : Sri Avinashilingam Education Trust , Coimbatore)

Vivekanandapuram – 641113,Karamadai Block, Coimbatore DT, TamilNadu

On Farm Testing conducted by the KVK

OFT Year: 1992- 2004

S. No	*year*	*Problem identified*	*Technology*	*Farmers practice*	*Technology option 1*	*Technology option 2*	*Name of the block*
1	1993-94	Poor nutrient management	Effect of enriched farm yard manure on rainfed sorghum	Nil	Introduction of EFYM application to rainfed sorghum	Nil	Karamadai
2	1993-94	Zinc deficiency symptoms in paddy	Application of zinc sulphate for paddy in zinc deficient area.	Nil	Introduction of soil application of zinc sulphate to paddy	Nil	Karamadai
3	1993-94	Poor nutrient management	Effect of enriched Farm Yard Manure on rainfed Groundnut	Nil	Introduction of EFYM application to rainfed groundnut.	Nil	Karamadai
4	1999-2000	Gradual Salt Deposition around the inner walls of the delivery pipe causes reduced output of water and creates many other related problems like 1. Irrigation intervals are extended to double	Elimination of Co2 from the atmospheric air by using Co2 eliminator unit in compressor	Elimination of Co2 from the atmospheric air by using Co2 eliminator unit in compressor	Prevention of excess oil which is coming out along with compressed air from the compressor	Control Unit	Annur
5	1999-2000	Third degree protein calorie malnutrition and anemia	Overcoming the mal nutritional problem among expectant mothers of schedule tribes group by feeding with protein and iron rich low cost supplementary mix	Bajra based with protein and iron rich supplementary indigenous food with nutrition education.	Wheat based with protein and iron rich supplementary indigenous food with nutrition education.	Home Food alone	Karamadai

6	1999-2000	Multi nutritional disorders and Stunted Growth	Prevention of stunted growth in calves due to multi-nutritional deficiency and natural disorders in calves	Deworming + concentrate feed	Deworming + concentrate + Mineral mixture	Deworming + Mineral mixture + Preparline forte injection + injection Tonophasphate + concentrate	Karamadai
7	2000-01	Releasing the bullocks from cart while unloading. Cart man has to get down and go back to remove the materials from cart. -Time Consuming -The cart cannot be slopped back without support	Impact of modification made in the bullock cart to reduce drudgery while unloading	The Existing cart was modified to go back and remove the materials automatically necessary materials were supplied for modification	Control unit		Karamadai
8	2000-01	Lowered Hemoglobin level during pregnancy under weight, Symptoms of B-complex deficiencies	Impact of feeding of Amylose rich food (ARF) incorporated in iron rich supplementary food to nursing mothers to overcome the problem of deceased milk output	Vitamin A rich Health Mix 75 gms per day per children supplied T1-Health Mix + Home food.	Health Mix, Greens and Home Food	Home food a lone	Karamadai
9	2000-01	Infertility in cross breed cows	Infertility problems in cross bred cows and over come the problems by increasing the fertility rate through deworming, mineral supplement and antibiotic / hormonal treatment	inj.Gentamycin sulphate – 20ml /day / animal for 3 days AI done	Inj. Strepto Pencilline 2.5 gms / day / animal for 3 days AI done	Inj. Endrocin 15 ml . day / animal for 3 days AI done	Karamadai

10	2001-02	Infertility in cross breed cows	Infertility problems in cross bred cows and overcome the problems by increasing the fertility rate through deworming, mineral supplement and antibiotic / hormonal treatment	inj.Gentamycin sulphate – 20ml /day / animal for 3 days AI done	Inj. Strepto Pencilline 2.5 gms / day / animal for 3 days AI done	Inj. Endrocin 15 ml . day / animal for 3 days AI done	Karamadai
11	2001-02	Under weight -Level of HB 8gm per 100 ml- Irregular menstrual cycle -paleness over face and body-Poor memory power -Late puberty	Prevalence of proteineamia among adolescent girls (13-17 yrs) of FLD farmers and overcoming the problem by feeding a protein – iron rich supplementary food	Nil	9 Kgs of the mix per beneficiary for 3 months	-	Karamadai
12	2002-03	Non awareness on white sesamum cultivation &Poor nutrient management.	Popularizing white Sesamum and organic farming under rainfed condition.	Improved seed + seed treatment with bio fertilizers	Improved Seed + Bio fertilizer + M.N. Mixture + Bio Pesticides	Control -local seed + chemical pesticide	Karamadai
13	2002-03	Imbalanced use of Inorganic fertilizers	Organic Farming Red Gram	Nil	Organic farming in Red gram	Nil	Karamadai
14	2002-03	Improper Use of Inorganic Fertilizers	Organic Farming in Groundnut	Whole package (TNAU)	Organic Farming (TNAU)	Control – Farmers Practice	Madathukulam
15	2002-03	Ecto and endo parasites in goats	Reducing worm burden and to increase body weight in goats	Tab. Albendazole and tab. Penbenazole once in 2 months	Inj Ivermentin ecto parasites is control by 1% butex solution once in 2 months	Control group - No treatment	Karamadai
16	2002-03	Under weight-Symptom of malnutrition-Sore eyes	Prevention of PCM anemia and nutritional blindness through feeding of low cost mix to preschoolers	Vit –A rich combination 75 g /day for 3 months Mix without carrot 75 g/day	Vit –A rich combin-ation 75 g/day for 3 months Mix with carrot 75 g/day	-	Annur

17	2002-03	Muscle fatigue is high Reduced total output. Maximum Muscle fatigue involved as the height and shape of the handle is found more inconvenient	Overcoming the problem of labour requirement and removing drudgery in using the existing earth augur by replacing with modified one in banana fields	Altered the shape of steering wheel Introduction of Screw jack type of shaft, makes the operation easier.	The Rod was made to fit with the frame for slopping and lowering down the cutting tool	Control unit	Karamadai
18	2003-04	The wastage of perishable foods like vegetables and fruits are higher in rural areas as they cannot afford for a modern refrigerator to store and for daily consumption	Home Preservation of fruits and vegetables with low cost cool chambers to extent the shelf life .	Improved Cool Chamber was fabricated under the guidance of KVK	The Zero Cool Chamber was introduced	Janatha Refrigerator was purchased and supplied	Karamadai
19	2003-04	Ecto and endo parasites in goats	Reducing worm burden and to increase body weight in goats	Tab. Albendazole and tab. Penbenazole once in 2 months	Inj Ivermentin ecto parasites is control by 1% butex solution once in 2 months	Control group - No treatment	Annur

OFT Year: 2004-05

S.No	Discipline	Crop	Problem identified	Title of the technology	Farmers practice	Technology option 1	Technology option 2
1	Agronomy	Groundnut	Micro nutrient deficiency symptoms & associated problems	Use of improved variety (VRI-3) + Bio fertilizers + Micro nutrients + split application of gypsum at 20th and 40th days after sowing	Use of poor quality of seed + application of inorganic fertilizers (NPK) alone (not applying any bio fertilizers / micronutrients including Gypsum)	Use of quality seeds + bio fertilizers + Micronutrients + Gypsum application at 40 DAS	Use of improved variety seeds (VRI-3) + soil application of bio fertilizer (Rhizobium) + Micronutrients + split application of gypsum at 20 and 40 DAS
2	Horticulture	Jasmine	Low productivity and poor quality in Jasmine during winter season in Karamadai block when prices of Jasmine are at the highest.	Covering the plants using Polythene sheets during night time only to overcome the problem of yield and quality reduction in flowers due to direct exposure to winter frost.	Irrigation during night time (extend of adoption)	No specific recommendation available	Covering the plants using polythene sheets during night time only which prevents direct exposure of plants to the winter frost site and increases the yield and quality of flowers
3	Animal Science	Goat	Decrease in body weight and infertility due to worm burden and ecto parasitic lead	Reducing the worm burden and increasing body weight of local goats by a combination of internal and ecto parasitic control.	Nil	Albendazole + Fenbendazole @ 1.5 g each (given to 50 goats once in two months)	Albendozole (1.5g) Ivermentin injection (0.5ml)+ Ectoparasite control (Butax) 1% solution (dip and spray once in two months).
4	Agri. Engineering	Groundnut	Hand operated Groundnut decorticator - Effort required to operate the implement imposes strain to the operator-	Type of the handle movement changed into pedaling rotary movement Shelling pad which is available work for semi circle is modified to operate full circle.	One farmer (already having existing groundnut decorticator)was selected to assess the effort required and the output of the groundnut decorticator	The shelling pad is to work for semi-circle, now changed for full-circle by rotary movement. The top side of the groundnut decorticator is fully covered with hopper provision to avoid spill over.	One farmer was selected with the existing model groundnut decorticator brought under refinement to assess the output by rotary motion with pedal operation. The top side of thie decorticator is also fully covered to avoid spill over.

OFT Year : 2005-06

S No	Crop	Variety	Farming situation	Problem identified	Title of the technology	Farmers practice	Technology option 1	Technology option 2
1	Groundnut	Co-2	Irrigated	Yield reduction due to poor weed management	Weed management in Irrigated Ground nut	Hand Weeding twice at 20 & 40 DAS	Fluchloraline 2 lit /ha as pre emergence and one hand weeding at 35-40 DAS	Metalachlore 2 lit /ha as pre emergence & earthing up +Soil application of Metalachlore 2 lit /ha at 40 DAS
2	Bitter gourd		Irrigated	Low Yield due to pest and disease incidence	Pest and disease management in bitter gourd using organic practices	For pest control monocrotophos – 5 ml/lit for disease control	For pest control Malathion –1ml/lit carbofuron 3G- 40g/pit	Seed treatment and spraying of Trichoderma viride –1 kg, Neem cake – 50 kgs, Fishmeal trap – Malathion – 100 ml
3	Goat farming			Increased feed cost in meat production	Use of tapioca waste as feed ingredients	Their goat only on grazing and do not provide concentrate feed due to increased feed cost	Sheep and goat has to be reared on grazing, supplementary feed with concentrated feed	Tapioca waste disordered from Sago factory is being used to supplementary goat feed in different parts of Tamil Nadu. The same can be used in this area as tapioca waste available in plenty
4	Dairy farming			Improper diagnostic and maintenance of low productive animals	Isolation and culling of low productive animals due to infectious diseases	Unknowingly the farmers are maintaining low productive animals by providing required nutrients and periodical treatments	Periodical treatment of animals based on symptoms	200 animals were given Brucellosis test - 7 positive and 193 negative results through TNUVAS RTC .Based on the result measures were taken.
5	Home Science			No. / insufficient milk secretion lack of knowledge on millet based supplementary food. Prevalence of anemia	Feeding of Amylase rich supplementary formula to nursing mothers to improve / increase the breast milk secretion	Imbalanced diet with rice as staple food. No millets are included	Supplementary food based on all cereals, pulses and oilseeds without specific proportion	Protein and iron rich supplementary food is formulated using Amylase rich millets, pulses and oilseeds in the ratio of 3:2, 1:2

OFT Year :2006-07

S No	Crop	Farming situation	Problem diagnosed	Title of technology	Farmers practice	Technology option 1	Technology option 2	Name of the block
1	Maize	Irrigated	Labour scarcity and yield loss due to non control of early and late emerging weeds	Weed management in maize	Two hand weeding at l8th and 45th day after sowing	Pre emergence herbicide (Atrazine) at 3rd day after sowing @ 0.5 kg./ha and hand weeding at 45th day after sowing	Pre-emergence herbicide (Atrazine) at 3rd day after sowing @ 0.5 kg./ha + post emergence herbicide (2-4-D) at 45 th day after sowing @ 0.5 kg/ha.	Madathukulam
5	Paddy (ADT)	Irrigated	Yield loss due to imbalanced application of fertilizer and requirement of bulky organic manure	Fertilizer use efficiency in paddy	Excess application of chemical fertilizers	Application of 12.5 t of FYM + Split doses of recommended dose of fertilizer @ 120:38:38 kg NPK/ha for short duration and @ 150:50:50 kg NPK/ha for medium and long duration varieties.	Application of 750 kg of enriched FYM as basal and neem cake blended urea(5:1 urea: Neam cake) + K in split doses @ 120: 38:38 kg NPK/ha for short and 150:50:50 kg NPK/ha for medium and long duration varieties	Anaimalai
6	Banana	Irrigated	Reduced fruit quality	Enhancement of fruit quality in banana	Indiscriminate use of fertilizers-3rd month after planting N:P:K=87.5:287.5: 90 kg/ha, 5th month NPK= 78.5:32.5:32.5 kg/ha.7th month NPK 46:0:30 kg/ha.	3rd month after planting NPK= 37.5:35:110 g/plant 5th month NPK=37.5:0:110 g/plant, 7th month NPK=35:0:110 g/plant	Sulphate of potash can be integrated in banana nutrition as foliar spray at 1.5% concentration twice, first at the time of opening of last hand,2nd 30 days after first spray	Karamadai

7	Banana	Irrigated	Reduced fruit quality	Enhancement of fruit quality through panchakavya in banana	Indiscriminate use of fertilizer 3rd month after planting N:P:K=87.5:287.5: 90 kg/ha 5th month N:P:K 78.5:32.5:32.5 kg/ha 7th month N: P: K 46:0:30 kg/ha.	Sulphate of potash as foliar spray at 1.5% concentration twice, first at the time of opening of last hand, second 30 days after first spray	Tie up 100 ml 3% Panchakavya solution at the naval end of the bunch after the male bud is removed	Karamadai
8	Banana	Irrigated	Yield loss due to stem splitting	Management of stem splitting in banana	Destroyed the affected plants	Drenching with carbendazim @ 2 g/litre of water for 3 times 1st at 3rd month others in one month interval	Plant drenching with Pseudomonas fluorescence @10g/litre of water for 3 times first at 3rd month other in 5th and 7th month + Neem cake @ 250 g/plant at 5th month	Karamadai
9	Dairy farming		Repeated insemination and natural mating is being practiced by the farmers	Supplementation of mineral mixture in treating repeat breeder cows	Repeated insemination and natural mating is being practiced by the farmers	Treatment for mastitis, supplementation with nutrients and minerals	Supplementation with minerals	Periyanaickenpalayam
10	Banana		Banana flower is wasted along with stem after harvest. & Lack of processing aspects on banana stem and flower	Processing and preservation of banana Stem and flower	Minimum quantity of banana stem and flower alone could be used for sale and for immediate consumption.	No recommended practice	Processing aspects introduced for easy marketing	Karamadai
11	Bhendi	Irrigated	Non-availability of farm labourers Feel painful process Unsafe to the fingers	Evaluation of different bhendi pluckers	Direct contact of fingers in plucking operations	Using surgical gloves for plucking	1. V type cutter 2. Ring model cutting tool 3.Using of simple individual finger glove	Annur

12	Sapota	Irrigated	Labour scarcity Existing method damages the branches of trees and damages harvested (fallen)fruits results poor keeping quality	Effective harvesting techniques in sapota	Generally using knife edged bamboo stick	Using knife edged MS pole – top end with nylon basket	Adopting the light weighted aluminum pole attached with knife edged cutter having bottom end with nylon basket	Karamadai
13	Bhendi	Irrigated	Yield reduction due to imbalanced nutrient application	IPNS in Bhendi	Conventional method of fertilizer application	Blanket application of 40:50:30 Kg N: P_2O_5 : K_2O (Kg /ha)	Soil test based NPK + FYM + Bio-fertilizer	Karamadai
14	Maize	Irrigated	Low yield due to zinc deficiency	Micro nutrient application for maize	Low application of Micro nutrient	Application of135:62.5:50 N:P_2O_5:K_2O (kg/ha), zinc sulphate 25 kg/ha	Soil test based NPK + 12.5 kg zinc sulphate soil application + 0.5%zinc sulphate foliar spray@ 30,45,60 th DAS	Karamadai

OFT Year : 2007-08

S. No	*Thrust area*	*Crop/ Enterprise*	*Identified Problem*	*Title of OFT*	*Farmers practice*	*Technology option 1*	*Technology option 2*
1	Micronutrient deficiency of crops	Maize	Yield reduction due to micronutrient deficiency	Foliar application of micro nutrients	No application of micronutrients	Foliar application of $ZnSo_4$ @ 0.5% + 2.5% lime solution on 30 DAS	Foliar application of $FeSo_4$ @ 1% +$ZnSo_4$ @ 0.5% +Borax @ 0.2% + Citric acid @ 0.1% thrice, 1st at 30 DAS others at 15 days interval after first spray.
2	Weed management	Rice	Yield reduction due to early and late emergence weed	Evaluation of weed management in rice	Two hand weeding (first at 15 days after sowing, 2nd at 30-35 days after sowing.	Application of pre-emergence herbicide – Butachlor @ 2.5 liter/ha at 3rd day after sowing + one hand weeding @ 30-35 days after sowing.	Manually operated rotary weeder twice in line sowned paddy field - First at 10 days after sowing, 2nd at 20-25 days after sowing and one hand weeding at 30-35 days after sowing.
3	Pod setting	Greengram	Yield reduction due to poor pod settings in Greengram	Foliar spray of Panchagavya for enhancing pod settings in Greengram	Not practiced	2% DAP spray at the time of first appearance of flowers and 2nd at 15 days after first spray.	3% Panchagavya spray first at appearance of flowers, and 2nd at 10 days after spray.

4	Introduction hybrids	Sunflower	Low yield due to sowing of old variety / hybrid	Evaluation of new high yielding hybrids PAC 8699 and NK 275	Cultivation of sunflower with variety - Modern	Recommended variety : Co.4	Introduction and evaluation of new high yielding hybrids PAC-8699 and NK 275
5	Micronutrient deficiency of crops	Sunflower	Yield reduction due to micronutrient deficiency	Foliar application of micro nutrients	-	Foliar application of $MnSo_4$ @0.5% + $ZnSo_4$ @0.5% on 30, 40, 50 th DAS	Foliar application of Borax @ 0.2% + Salicylic acid 100 ppm at the time of flowering
6	Fruit quality	Banana	Reduced fruit quality	Evaluation of Panchagavya solution to improve fruit quality in banana	Indiscriminate use of fertilizers - 3rd month after planting N:P:K;:87.5:287.5:90 kg./ha, 5th month after planting N:P:K:78.5:32.5:32.5 kg./ha, 7th month after planting N:P:K=46:0.30 kg./ha	Sulphate of potash as foliar spray at 1.5% concentration twice, first at the time of opening of last hand, second 30 days after first spray	Tie up 100 ml 3% Panchagavya solution at the naval end of the bunch after the male bud is removed

7	Stem splitting	Banana	Yield loss due to stem splitting	Management of stem splitting in banana	Destroyed the affected plant	Drenching with carbendazim @ 2 g/liter of water for 3 times first at 3rd month after planting others in one month interval	Plant drenching with Pseudomonas fluorescence @ 10 g/liter of water for 3 times first at 3rd month others in 5th and 7th month after planting + neem cake @ 250 g/plant at 5th month after planting.
8	Flower and fruit drop	Chilies	Low yield due to flower and fruit drop in chilliest	Management of flower and fruit drop in chilies	No special technology was adopted.	Foliar spray of NAA-10 ppm (100 mg/1 lit of water) on 60 and 90 days after planting	Foliar spray of NAA 10 ppm (100 mg/liter of water) and banana special mix 5 mg/liter of water on 60 and 90 days after planting.
9	Nursery techniques	Chilies	Low yield due to in healthy and poor plant population	Evaluation of seedling production techniques	Seedling production from the flat nursery bed	Seedling production from the raised nursery bed (line sown with Trichoderma Viride treated seeds at 10 cm in raised bed and cover with sand	Seedling production from the pro-tray (Tray medium: Cocopeat 1 kg/Tray+ Seed treatment with Pseudomonas fluorescence @ 10 g/kg of seed)

10	Density planting and fruit quality enhancement	Banana	Low net returns due to poor hand use system and poor fruit quality	High density planting and fruit quality enhancement in banana	Planting of single sucker/pit at a spacing of 1.8 mx1.8 m (3086 plants/ha) and no special measure is taken to enhance fruit quality	Planting of 3 suckers/pit at a spacing of 1.8 m x 3.6 m (4600 plants/ha) and bunch cover with transparent polythene sleeves with 2% (during cool season) - 4% (during summer season) for ventilation at immediately after opening of the last hand.	Planting of G-9 @ 3 suckers/pit at a spacing of 1.8 m x 3.3 m (5050 plants/ha) with bunch cover in different ventilation

OFT Year : 2008-09

S. No	*Thrust area*	*Crop/ Enterprise*	*Identified Problem*	*Title of OFT*	*Farmers practice*	*Technology option 1*	*Technology option 2*
1	Enhancing production & productivity	Maize	More weeds	Weed management in maize	Two hand weeding 1st at 18th day after sowing 2nd at 40-45th days after sowing	Application of pre-emergence herbicide – Atrazine 50 WP @ 500 g./ha. at 3rd day after sowing + One hand weeding at 40 – 45th day after sowing.	Application of pre-emergence herbicide – Atrazine 50 WP @ 500 g./ha. at 3rd day after sowing + one weeding with manually operated wheel hoe weeder at 40-45th DAS
2	Enhancing production & productivity	Banana	Poor population	High density planting and fruit quality enhancement in banana	Planting of single sucker/pit at a spacing of 1.8 mx1.8 m (3086 plants/ha) and no special measure is taken to enhance fruit quality.	Planting of 3 suckers/pit at a spacing of 1.8 m x 3.6 m (4600 plants/ha) and bunch cover with transparent polythene sleeves with 2% (during cool season) - 4% (during summer season) for ventilation at immediately after opening of the last hand.	Planting of G-9 @ 3 suckers/pit at a spacing of 1.8 m x 3.3 m (5050 plants/ha) with bunch cover in different ventilation

3	Plant protection in vegetables	Chilies	Yield loss	Management of flower and fruit drop in chilies	No special technology was adopted	Foliar spray of NAA-10 ppm (100 mg/1 lit of water) on 60 and 90 days after planting	Foliar spray of NAA 10 ppm (100 mg/litre of water) and micronutrient mix 5 mg/litre of water on 60 and 90 days after planting
4	Enhancing production & productivity	Chilies	Poor population	Evaluation of seedling production techniques	Seedling production from the flat nursery bed	Seedling production from the raised nursery bed (line sown with Trichoderma Viride treated seeds at 10 cm in raised bed and cover with sand)	Seedling production from the pro-tray (Tray medium: Cocopeat 1 kg/Tray+Seed treatment with Pseudomonas fluorescens @ 10 g/kg of seed)
5	Enhancing production & productivity	Paddy	Labour scarcity	Performance and suitability of various mechanical weeder in paddy	Manual weeding	2 row rotary weeder	Single row cono weeder
6	Enhancing milk quality and quantity	Dairy	Scarcity of fodder	Introduction of Azolla in animal feed	Feeding of groundnut cake and cotton seeds	Feeding of concentrate feed alone	Feeding of azolla along with concentrate feed
7	Enhancing production & productivity	Turmeric	Poor population	Varietal evaluation in turmeric	Variety: BSR -2	Variety: Praba	Variety: Prathibha

8	Enhancing milk quality and quantity	Dairy	Low/ poor milk yield	Effect of EM in Milch animal for enhancing the quality and quantity of milk	Not following the scientific feeding practices	Green fodder 10-15 kg/cow / day Dry fodder 5 kg / cow/ day Concentrate feed 1.5- 2 kg / cow / day Mineral mixture- 2530gm / cow /day	Green fodder 10-15 kg/cow / day Dry fodder 5 kg / cow/ day EM bokashi 1kg/ cow / day EM solution 20 ml /cow/day

OFT Year : 2009-10

S. No	*Thrust area*	*Crop/ Enterprise*	*Identified Problem*	*Title of OFT*	*Farmers practice*	*Technology option 1*	*Technology option 2*
1	Enhancing production & productivity in oilseeds	Sunflower	Low yield due to non adoption of seed setting measures	Improving seed set in sunflower	Not practiced	Mild rubbing of the capitulum with the soft cloth at 58 to 60 DAS	Rubbing of two flowers face to face at mid flowering phase (58 to 60 DAS) + spraying of 0.2% borax at capitulum floret opening stage
2	Enhancing production & productivity in pulses	Bengalgram	Low yield due to poor pod setting in Bengalgram	Enhancement of pod setting in Bengalgram	Not practiced	2% DAP spray at the time of first appearance of flowers. 2nd at 15 days after first spray	1% urea + 0.5% ZnSo4 spray at the time of flowering 2nd at 15 days after first spray
3	Introduction of new high yielding varieties in turmeric	Turmeric	Existing varieties having low curcumin content	Varietal evaluation in turmeric	Variety: BSR -2	Variety: Praba & Alleppy supreme	Variety: Ketharam & Prathibha

4	Enhancing milk quality and quantity	Dairy farming	Low milk yield	Effect of EM in milch animal for enhancing the quality and quantity of milk	Not following the scientific feeding practices	Green fodder 10-15 kg/cow / day Dry fodder 5 kg / cow/ day Concentrate feed 1.5- 2 kg / cow / day Mineral mixture-25-30 gm / cow /day	Green fodder 10-15 kg/cow / day Dry fodder 5 kg / cow/ day EM bokashi 1kg/ cow / day EM solution 20 ml /cow/day
5	Nutrient Management	Goat rearing	Low weight gain and number kids	Goat breed for higher productivity	Farmers practiced Natural mating with local breed	Mating local breed with Tellicherry and Jamuna pari	Artificial Insemination with Boyer Semen

OFT Year : 2010-11

S. No	*Thrust area*	*Crop/ Enterprise*	*Identified Problem*	*Title of OFT*	*Farmers practice*	*Technology option 1*	*Technology option 2*
1	Cereals based production system and Farm machinery	Paddy	Cost of operation is high in conventional practices	Performance and suitability of various weeders in paddy cultivation	Weeding with Rotary weeder	Weeding with Multi row power weeder (TNAU).	Weeding with Multi row power weeder (STIHL).
2	Nutrient Management	Boer Goat	Low weight gain and number kids	Introduction of Boer goat among local farming community	Breeding of goat with locally available goats	cross breeding of local goat with Boer Semen	-
3.	Nutrient Management	Dairy	Infertility	Synchronization of estrus in dairy cows	Doing A.I for different animals when they come for oestrus at different periods	Oestrus synchronization with Ovo syn technology	-
4	Nutrient Management	Poultry	Ranikhet disease	Assessment of oral pellet vaccination in Desi chicken	No Vaccination/ Vaccination at 8^{th} week to 10^{th} week at veterinary dispensaries	Lasotta vaccine 7^{th} to 10^{th} day RDVK vaccine 8^{th} and 16^{th} week	Oral pellet vaccine 7^{th} to 10^{th} day Oral pellet vaccine at 8^{th} week

OFT Year : 2011-12

S. No	*Thrust area*	*Crop / Enterprise*	*Identified Problem*	*Title of OFT*	*Farmers practice*	*Technology option 1*	*Technology option 2*
1	Integrated Crop Management	Blackgram	Poor flower retention and pod setting	Assessing the foliar application of Methylobactrium for drought tolerance in Black gram (CO 6)	Foliar spray of 2 % DAP at flowering and 2 nd spray on 15 days after 1 st spray	Seed treatment with methylobactrium @ 20 g /kg+ *P.fluorscence* @ 10 g/kg+ *T. viride* @ 4g/kg –ST and Foliar spray 2 times during pre and post flowering stage @ 500ml/ha	---
2	Varietal assessment	Bengalgram	Low yield due to repeated use of same cultivar. It leads to depletion of seed vigor	Assessing the performance of Bengalgram variety in Rain fed condition with ICM practice.	Co-4	Dharwad A-1	---
3	Integrated Crop Management	Maize	Genetic impurity in private hybrid and weed infestation at early stage	Assessing the performance of Maize variety in irrigated condition with ICM practice.	Harsha	Arjun	---

4	Integrated Crop Management	Turmeric	Low yield due to disease occurrence	Assessing the management practices of rhizome rot and foliar disease of Turmeric	Drenching and Foliar spray of Propiconazole (Tilt) 3 %	Rhizome treatment with Propiconazole 0.1 %+ Foliar spray with0.1 % Propiconazole on 120 and 150 DAP	Rhizome treatment with Metalaxyl @2 g/lit + Psedomonas fluorescens@10g/lit. soil drenching with 0.2% Metalaxyl(90DAP) foliar spray with Mancozeb + Carbendazin @2g/lit (120DAP) foliar spray with Tebuconazole @ 0.1 % on 150 DAP
5	Micronutrient deficiency in crops	Banana	Micro nutrient deficiency	Assessing the performance of micronutrient mixtures in Banana	Foliar application of Arka banana special	Foliar application of NRCB banana sakthi	Foliar Application of Zinc Sulphate (0.5%),Ferrous Sulphate (0.2%),Copper Sulphate (0.2%) and Borax (0.1%) at 3,5,and 7th month after planting
6	Income generation through poultry	Poultry	Poor weight gain due to local breeds	Assessing the performance of Desi chicken in Coimbatore district	Local variety of rural desi chicken	Hybrid desi chicken Namakkal 1	--

OFT Year: 2012-13

S. No	*Thrust area*	*Crop / Enterprise*	*Identified Problem*	*Title of OFT*	*Farmers practice*	*Technology option 1*	*Technology option 2*
1	Varietal Assessment	Bengalgram	Poor nutrient management & Low yield	Assessing the performance of Bengal gram variety in Rain fed condition with ICM practice	old variety	Cultivating CO 4	Cultivation of GBS 963
2	Varietal Assessment	Groundnut	Cultivation of age old varieties TMV 7 with poor seed replacement rate	Assessing the performance of groundnut varieties in Rain fed condition	TMV 7	Cultivating GPBD 4	cultivating GG 7
3	Integrated Nutrient Management	Groundnut	Lack of adoption in usage of bacterial inoculants	Assessing the efficiency of sulphur oxidizing bacterial inoculants in groundnut	RD of fertilizer + seed treatment with Rhizobium1 kg/ha	RD of fertilizer + seed treatment– Rhizobium1 kg/ha+1 kg of SOB and soil application of SOB @ 5 kg/ha on 45 DAS	--
4	Varietal Assessment	Tomato	Genetic impurity in private hybrid Disease incidence and low yield	Assessing the performance of Tomato hybrids	Mycho 5005	COTH3	Arka samrat
5	Nutrition Management	Dairy	Poor milk production in cross bred cows	Assessment of GRAND supplement in cross bred dairy cows	Feeding of gruel and gram husk	Feeding of GRAND supplement @ 20 ml /cow daily along with gruel and gram husk	---

OFT Year : 2013-14

S. No	*Thrust area*	*Crop / Enterprise*	*Identified Problem*	*Title of OFT*	*Farmers practice*	*Technology option 1*	*Technology option 2*
1	Varietal Assessment	Groundnut	Poor nutrient management & Low yield	Assessing the performance of Groundnut varieties	TMV 7	Cultivating Khadir 9	Cultivation of GPBD 4
2	Integrated Nutrient Management	Groundnut	Lack of adoption in usage of bacterial inoculants	Assessing the efficiency of sulphur oxidizing bacterial inoculants in groundnut	No seed treatment	Rhizobium seed treatment @ 2 kg /ha	Rhizobium seed treatment @ 2 kg /ha, Sulphur oxidizing bacteria @ 1 kg / ha + Sulphur oxidizing bacteria @ 5 kg / ha on 45 th day
3	Varietal Assessment	Coriander	Genetic impurity in private hybrid Disease incidence and low yield	Assessing the performance of Coriander varieties	Farmers practices joth	CO4	Arka isha
4	Nutrition Management	Live stock	Poor water availability	Assessing the Performance of different fodder grass varieties under coconut garden	Pure crop	CO-4	COFS 29

OFT Year : 2014-15

S. No	*Thrust area*	*Crop / Enterprise*	*Identified Problem*	*Title of OFT*	*Farmers practice*	*Technology option 1*	*Technology option 2*
1	Varietal Assessment	Groundnut	Unaware of drought tolent varieties	Assessing the performance of Groundnut varieties	Variety - TMV 7	Variety - ICGV 91114	Variety – Co 7
2	Maize nutri seed	Maize	Poor soil fertility and poor yield	Assessing the performance of maize nutri seed bag in irrigated condition	Direct sowing with maize seeds with recommended practices	Sowing with maize nutria seed pack	-
3	Assessing the performance of different intercrops in Banana	banana	Occurrence of weed growth and less returns in young banana	Assessing the performance of different intercrops in Banana	Onion	Marigold	Vegetable cowpea
4	Assessing the performance of Tuberose varieties	Tuberose	Poor yield and low market preference	Assessing the performance of Tuberose varieties	Prajwal	Phule rajanie	Arka niranthra
5	Assessing the performance of various groundnut TD harvesters	Groundnut	Labour scarcity during the peak season	Assessing the performance of various groundnut TD harvesters	Framers practice	TNAU Model	PAU Model
6	Ethno Veterinary Herbal medicine	Livestock	Foot and mouth disease	Assessment of Ethno Veterinary Herbal medicine for treatment of FMD in dairy cattle	Neem leaves and turmeric are boiled and Drenched	Administration of Ethnoveterinary Herbal medicine mixture	Administration of Mathan Thailam

OFT Year : 2015-16

S. No	*Thrust area*	*Crop / Enterprise*	*Identified Problem*	*Title of OFT*	*Farmers practice*	*Technology option 1*	*Technology option 2*
1	Cropping Systems	Curry leaf	Poor fertilizer management	Assessing the different fertilizer schedules for Curry leaf	Not recommended practice	Azospirillum Phosphobacteria Micro nutrient VAM	Azospirillum Phosphobacteria Micro nutrient VAM
2	Integrated Crop Management	Groundnut	Susceptible to drought	Assessing the performance of Groundnut varieties	Variety - TMV 7	Variety - ICGV 91114 Rhizobium Phosphobacteria Trichodrema viride Psudomonas	Variety Co 6 Rhizobium Phosphobacteria Trichodrema viride Psudomonas
3	Farm Mechanization	Farm Implement	Refinement in groundnut decorticator for easy adjustment	Refinement in groundnut decorticator for easy adjustment	Conventional method	CIAE Model	KVK model

OFT Year : 2016-17

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Title of OFT	Farmers practice	Technology option 1	Technology option 2	Technology option 3	Technology option 4
1	Varietal Evaluation	Ragi	Poor nutrient management & Low yield	Assessing the performance of Ragi varieties	Local	Cultivating ML 365	cultivation of Co 15	-	-
2	Water management	Onion	Poor water availability	Assessment of different drought mitigation technologies for small Onion	No recommended practice	Foliar spray of PPFM@ 0.1%	Foliar spray of glycinbetaine @ 5%	Foliar spray of kaolinite @ 5%	Soil application of Pusa hydro gell
3	Poultry	Desi birds	Poor weight gain due to local breeds	Assessing the performance of improved desi hybrids in Coimbatore region	Rearing local chick	Rearing Gramapriya chick	Rearing Nandhanam 4	-	-

OFT Year : 2017-18

S. No	Crop/ Enterprise	Title of OFT	Farmers practice	Technology option 1	Technology option 2	Technology option 3	Technology option 4
1	Bengalgram	Assessing the performance of Bengalgram varieties	Variety – Co 4	Variety-JAKI-9218	Variety – JG 14	Variety – GBM-2	-
2	Milch animal	Assessing the performance of different preventive measures for sub clinical Mastitis in milch animals	Traditional Herbal practice	Teat Dip-Herbal	Use of mastiguard in preventing mastitis	-	-
3	Glycemic index - Paddy	Assessment of glycemic respones of traditional paddy varieties	Milled rice	Kullakara Rice	Mappilla samba rice	-	-
4	Drudgery reduction - paddy	Assessment for drudgery reduction of different weeders in paddy	Manual weeding	Rotary star weeder for wet land	Modified cono weeder (Farmer Innovation) Validated by KVK, Karur	-	-

OFT Year : 2018-19

S. No	Crop/ Enterprise	Title of OFT	Farmers practice	Technology option 1	Technology option 2	Technology option 3	Technology option 4
1	Turmeric	Assessing the performance of different micronutrient mixtures in Turmeric	No micro nutrient application	TNAU recommended micro nutrient mixtures	IISR Turmeric mixture	-	-
2	Groundnut	Assessment of Groundnut varieties	Cultivation of TMV 7	Groundnut variety Co6	Groundnut variety Dharani	-	-
3	Banana	Assessing the performance of different composting technologies in banana waste	Collection and allowed for natural decomposition in the field itself.	Composting of banana wastages with NCOF "Waste decomposer"	Composting of banana wastages with TNAU "Bio Mineralizer"	-	-
4	Bhendi	Assessing the performance of Bhendi hybrids for yield and quality	Cultivation of Private hybrid (Sakthi)	Cultivation of Bhendi hybrid CO4	Cultivation of Arka Nikita	-	-
5	Vegetable Cowpea	Assessing the performance of high yielding Vegetable Cowpea for yield and quality	Cultivation of Private hybrid (Ankur)	Cultivation of Vegetable cowpea PKM-1	Cultivation of Kanagamony	-	-
6	Bakery	Assessment of Unpolished rice cookies and Millet cookies for human health	-	Refined flour based cookies	Unpolished rice cookies	Millet cookies	-
7	Groundnut seed drill	Assessing the performance of Various TD seed Drill (Groundnut)	Conventional method of Manually sowing	TNAU model TD seed drill (9 rows)	ANGRAU model TD seed drill (9 rows)		-
8	Banana	Assessment of different varieties of banana flour for cost and quality of bakery products	-	Kadhali	Mories	Nendiran	-

OFT Year : 2019-20

S. No	Crop/ Enterprise	Title of OFT	Farmers practice	Technology option 1	Technology option 2	Technology option 3	Technology option 4
1	Curryleaf	Assessing the performance of different fertilizer schedules in curryleaf	Application of urea (2 bags) alone after harvest	NPK@5:10:10g/plant/ harvest along with 4 kg of FYM + gypsum application (for every harvest) - NIPHM	NPK @60:80:40 g/plant/year along with 10 kg of FYM + gypsum Application – TNAU	-	-
2	Greengram	Assessing the performance of green gram varieties	Cultivation of Greengram variety Co 6	Cultivation of Greengram variety Co 8	Cultivation of Greengram variety DGG 1	-	-
3	Water melon	Assessment of high yielding Water melon varieties suitable for Coimbatore district	Cultivation of Private variety (Sugar baby)	Cultivation of Water melon variety Arka muthu	Cultivation of Water melon variety Shonima	-	-
4	Maize	Assessment of management modules against Fall army Worm in Maize	-	IPM Practices	Pesticide application	-	-
5	Bakery	Assessment of different sweeteners for cookies preparation	White sugar incorporated cookies	Palm sugar incorporated	Jaggery incorporated	-	-

OFT Year : 2020- 21

S. No	Crop/ Enterprise	Title of OFT	Farmers practice	Technology option 1	Technology option 2	Technology option 3	Technology option 4
1	Greengram	Assessment of Greengram varieties	Cultivation of Greengram variety Co 6	Cultivation of Greengram variety Co 8	Cultivation of Greengram variety DGG 1	-	-
2	Maize	Assessment of Maize Fall Army worm management in Maize	-	IPM Practices	Pesticide application	-	-
3	Curryleaf	Assessing the performance of different fertilizer schedules in curryleaf	Application of urea (2 bags) alone after harvest	NPK@5:10:10g/plant/ harvest along with 4 kg of FYM + gypsum application (for every harvest) - NIPHM	NPK @60:80:40 g/plant/year along with 10 kg of FYM + gypsum Application – TNAU	-	-
4	Water melon	Assessment of high yielding Water melon varieties suitable for Coimbatore district	Cultivation of Private variety (Sugar baby)	Cultivation of Water melon variety Arka muthu	Cultivation of Water melon variety Shonima	-	-
5	Nutritional security	Assessment of different types of herbal powder incorporated millet cookies	White sugar incorporated cookies	Thuthuvalai powder incorporated	Thulasi powder incorporated	-	-

OFT Year : 2021 - 22

S. No	Crop/ Enterprise	Title of OFT	Farmers practice	Technology option 1	Technology option 2	Technology option 3	Technology option 4
1	Sorghum	Assessment of Dual purpose Sorghum varieties	Cultivation of Sorghum cultivar Chencholam	Sorghum Variety: Co 32	Sorghum Variety: CSV 27	-	-
2	Chilli	Assessment of dual purpose Chilli hybrids for yield and market preference	Cultivation of Private variety (Jothi)	Cultivation of Chilli hybrid ArkaTanvi	Cultivation of Chilli hybrid Co-1	-	-
3	Rice	Assessment of Zn solubilizing bacteria as inoculants for Zn nutrition in Rice production	Without Zn solubilizing bacteria	Zn solubilizing bacteria (TNAU)	Zn solubilizing bacteria (IIHR)	-	-
4	Goats	Assessment of performance of small ruminant mineral mixture on production performance in goats	No mineral mixture given	Small ruminant mineral mixture (NIANP)	TANUVAS Small Animal mineral mixture	-	-
5	Mushroom Value addition	Assessing the performance of Oyster mushroom varieties	Co2 white Oyster mushroom	APK 1Pink Oyster mushroom	ARKA.OM 1. Pink Oyster mushroom	-	-

OFT Year : 2022 - 23

S. No	Crop/ Enterprise	Title of OFT	Farmers practice	Technology option 1	Technology option 2	Technology option 3	Technology option 4
1	Groundnut	Assessing the performance Groundnut varieties	Variety Dharani	Variety VRI 10/BSR 2	Variety Khadiri lepakshi	-	-
2	Bottle gourd	Assessment of Bottle gourd hybrids for yield and market preference	Variety Nivida	Variety Arka Nutan	Variety Co-1	-	-
3	Tomato	Assessing the performance of different micronutrient formulations in Tomato	Application of macronutrients alone	Application of TNAU Micronutrient liquid	Application of IIHR Vegetable special	-	-
4	Paddy	Assessing the performance of nano urea formulation in paddy cultivation	Soil application of DAP @250kg/Ha, Urea 150 kg/Ha, Potash 50 kg/Ha	Soil application of IFFCO , 2021	Soil application of TNAU, 2020	-	-
5	Acaricides	Assessment of acaricidal efficacy in Small ruminants	Not using acaricides or using over the counter available acaricides	using acaricides NIF-DST, 2019	using acaricides TANUVAS, 2011	-	-
6	Vegetables	Assessment of different coating formulation to improve the shelf life of fruits and vegetables	Direct marketing	ICAR- IINRG Ranchi	TNAU Fruit fresh		

OFT Year : 2023

S. No	Crop/ Enterprise	Title of OFT	Farmers practice	Technology option 1	Technology option 2	Technology option 3	Technology option 4
1	Ragi	Assessing the performance of Ragi varieties	Cultivation of Ragi variety Local	Ragi Variety: Indhravathi	Ragi variety ATL 1	-	-
2	Bengalgram	Assessing the performance Bengalgram varieties	Cultivation of Bengalgram variety Jakki	Bengal gram Variety: NBeG 47	Bengalgram variety NBeg 49	-	-
3	Tomato	Assessment of the performance of high yielding Tomato Hybrids	Cultivation of Private hybrid (Sivam)	Cultivation of Tomato hybrid Arka vikas	Cultivation of Tomato hybrid CO-4	-	-
4	Greens	Assessment of new high yielding Amaranthus varieties	Cultivation of local cultivars	Cultivation of Amaranthus variety Arka Arunima	Cultivation of Amaranthus variety Vaika	-	-
5	Lab lab	Assessment of the performance of high yielding varieties of Lab lab (Bush type)	Cultivation of local cultivars	Cultivation of Lab lab variety CO -16	Cultivation of Lab lab variety Arka Shambhram	-	-
6	Greengram	Assessing the performance of different nutrient sprays in Greengram	Soil application of macro nutrients alone	Soil test based fertilizer recommendation, N and P as Nano DAP. (First spray at 45 th DAS and Second spray at 60 th DAS) (IFFCO)	Soil test based fertilizer recommendation (TNAU) N and P as DAP. (First spray at 45 th DAS and Second spray at 60 th DAS)	-	-
7	Chilli	Assessing the performance of different micronutrients in chilli crop for higher yield	Soil application of macro nutrients alone	Soil test based fertilizer recommendation along with IIHR micronutrient application	Soil test based fertilizer recommendation along with TNAU micronutrient application	-	-

8	Groundnut	Assessing the performance of nutrient management in Groundnut	Application of farmyard manure and FACTAMFOS alone	STCR with TNAU Nutrient management practices	STCR with ANGARU Nutrient management practices	-	-
9	Pulses.	Assessing the Performance of storage techniques in Cereals and Pulses.	Stored in gunny bag	IRRI Super bag	TNAU Sweet flag	-	-

OFT Year : 2024

S. No	Crop/ Enterprise	Title of OFT	Farmers practice	Technology option 1	Technology option 2	Technology option 3	Technology option 4
1	Cotton	Assessment of Different intercropping in Cotton production	Pure Crop	Pulses as inter crop	Vegetables as inter crop	-	-
2	Bengalgram	Assessing the performance Bengalgram varieties	Cultivation of Bengalgram variety Jakki	Bengal gram Variety: NBeG 776	Bengalgram variety NBeg 857	-	-
3	Marigold	Assessment of Marigold hybrids for yield and market preference	Private hybrid (Indus)	Marigold hybrid Arka Abhi	Marigold hybrid Arka Vibha	-	-
4	Ridge gourd	Assessment of Ridge gourd varieties MDU 1 and Arka Prasan for higher yield	Private variety (Novel)	Ridge gourd variety MDU -1	Ridge gourd variety Arka Prasan	-	-
5	Chilli	Assessment of Chilli hybrids for yield and market preference	Cultivation of Private hybrid (Jothi)	Cultivation of Chilli hybrid Arka Dhriti	Cultivation of Chilli hybrid Co-1	-	-

6	Brinjal	Assessment of Brinjal varieties for yield and market preference	Cultivation of local cultivar	Cultivation of Brinjal variety Co-3	Cultivation of Brinjal variety VRM (Br) 2	-	-
7	Cassava	Assessing the performance of nutrient management practices in Cassava	Soil application of macro nutrients alone	STFR , Application of FYM 25 t/ha + 45:90:120 kg NPK/ha as basal and 45:120 kg NK/ha on 90 DAP + Application of Bio fertilizers + Cassava booster 12.5 kg/ha @ 1,2 and 3 MAP (TNAU)	STFR , Application of FYM 12.5t +Apply NPK, FeSO4, ZnSO4 @ 97:13.5:155:25:10 kg/ha along Azospirillum + Phosphobacteria + potash solubilizing bacteria 2 kg/ha bio fertilizers application basal and 3 MAP •Cassava special 0.5 % at 2,3 & 4 MAP (CTCRI)	-	-
8	Tomato	Assessing the performance of different growth enhancers in Tomato	Soil application of macro nutrients alone	Soil test based fertilizer recommendation along with TNAU Bio Albumin application	Soil test based fertilizer recommendation along with NBAIM Bio grow application	-	-