

**ICAR-Agricultural Technology Application Research Institute, Hyderabad**  
**ACTION PLAN 2020-21**

**1. General information about the KrishiVigyan Kendra**

1.1 Name and address of KVK with Phone, Fax and e-mail	ICAR KrishiVigyan Kendra, Pulutheri Village, R.T Malai (PO) Kulithalai (TK), Karur District - 621 313 Mobile : 09790020666 E-mail : <a href="mailto:skvkk@yahoo.co.in">skvkk@yahoo.co.in</a> , Website : <a href="http://www.skvkk.org">www.skvkk.org</a>
1.2. Name and address of host organization with phone No. and email	Saraswathi Foundation for Rural Development and Training, Pulutheri Village, R.T Malai (PO) Kulithalai (TK), Karur District - 621 313 Mobile : 09790020666
1.3. Year of sanction	13 <sup>th</sup> April, 2005 (F. No. 18-5/96-AE-I)
1.4. Website of the KVK and date of last update	Website : <a href="http://www.skvkk.org">www.skvkk.org</a> , Last updated 30.04.20

**2. Details of staff as on date:**

S. No	Sanctioned post	Name of the incumbent	Discipline	Existing Pay band	Grade Pay	Date of joining	Permanent
1	Senior Scientist & Head	Dr. J. Diraviam	Agricultural Entomology	37400-67000	9000	03.05.10	Permanent
2	Subject Matter Specialist	Dr. P. Tamil Selvi	Agricultural Extension	15600-39100	5400	29.05.09	Permanent
3	Subject Matter Specialist	Dr. L. Malathi	Home Science	15600-39100	5400	16.08.13	Permanent
4	Subject Matter Specialist	P. Kaviyarasu	Horticulture	15600-39100	5400	16.08.13	Permanent
5	Subject Matter Specialist	M. Thirumurugan	Agronomy	15600-39100	5400	16.08.13	Permanent
6	Subject Matter Specialist	N. Marikannu	Soil Science	15600-39100	5400	03.08.15	Permanent
7	Subject Matter Specialist	Dr. R. Arun	Animal Science	15600-39100	5400	19.06.15	Permanent
8	Programme Assistant	P. Karuppasami	Lab Technician	9300-34800	4200	02.12.10	Permanent
9	Computer Programmer	J. Arunkumar	Computer	9300-34800	4200	29.03.10	Permanent
10	Farm Manager	N. Srithar	Farm Manager	9300-34800	4200	16.08.13	Permanent
11	Accountant/ Superintendent	V. Boopathi	-	9300-34800	4200	01.09.06	Permanent
12	Stenographer	Dr. S. Latha	-	5200-20200	2400	03.05.07	Permanent
13	Driver 1	P. Mohanraj	-	5200-20200	2000	09.07.18	Permanent
14	Driver 2	S. Gopinath	-	5200-	2000	09.07.18	Permanent

				20200			
15	Supporting staff 1	P.Saravanan	-	5200-20200	1800	01.06.10	Permanent
16	Supporting staff 2	R.Perumal	-	5200-20200	1800	01.02.11	Permanent

### 3. Details of SAC meeting conducted during 2019-20:

**Date of SAC meeting Conducted:**18.02.2020

#### **Suggestions and recommendations of the SAC and Action Taken on the Recommendations**

S.No.	Suggestions/Recommendations (main bullet points)	Name of the SAC Member	
1.	To create separate WhatsApp group for sending information to farmers, only by KVK Scientists.	Dr. A. Bhaskaran, Principal Scientist, ICAR-ATARI, Hyderabad	
2.	To collect farmers feedback regarding Frontline demonstration technologies.		
3.	To promote only marketable technologies		
4.	To give feedback on technologies to concerned Research Station and Department.		
5.	To organize exposure visit to women entrepreneurs to Large scale value addition unit for millets in Srikakulam area of Andhra Pradesh.		
6.	To demonstrate paddy cultivation under drip irrigation in major growing blocks	Mrs. G. Valarmathi, Joint Director of Agriculture	
7.	To demonstrate Fall Armyworm management in Maize.		
8.	To study the reason for area decrease in redgram cultivation		
9.	To introduce alternate paddy variety for BPT 5204		
10.	To send SMS through mkisan portal regarding Kisan Credit Card and other GOI schemes		
11.	To assist for getting GI tag to agricultural commodities in Karur		Mr.M.Paramesh Kumar, Deputy General Manager, NABARD
12.	To give thrust to Hitech horticulture		
13.	To increase the farmers contact numbers in farmers database		
14.	To introduce soil map based cropping pattern		
15.	To prepare Crop suitability map for Karur district		
16.	To give thrust to Fisheries		
17.	To promote innovative farming technologies through NABARD grant assistance.		
18.	To demonstrate IPM practices against wilt and mite problem in betelvine	Deputy Director of Horticulture	
19.	To introduce triple disease resistant Tomato F1 hybrid -ArkaRakshak		

20.	To demonstrate management practices for Banana sigatoka leaf spot	
21.	To give thrust for fodder production, storage and rational feeding of livestock.	Dr. Radhakrishnan, Regional Joint Director of Animal Husbandry
22.	To inform regarding all animal science related programmes to Animal Husbandry department.	
23.	To give bulk SMS on FMD vaccination camp through m Kisan portal	
24.	To organize agriculture and allied training programmes sponsored by RSETI	Mr.RenganathaPrabhu, Director, RSETI
25.	To organize refresher training programmes to FPO to revamp their functioning	Deputy Director of Agriculture (Agribusiness)
26.	To create awareness on quality food and AGMARK certification among school children and house hold women	
27.	To make diagnostic visit to coconut growing areas to check the occurrence of Rugose whitefly, monitor the spread and provide management measures.	
28.	To organize training programmes to Rural youth on Good Agricultural Practices in field and horticultural crops.	
29.	To study the success rate of improved technologies such as Prosync NC, gold quail and Gramapriya desi bird.	
30.	To collect secondary data on the suitability of Super napier fodder grass.	Veterinary University Training and Research Centre, Pandithakaranputhur
31.	To study the suitability of azolla in all seasons	
32.	To promote water harvesting techniques such as chisel ploughing and Contour bunding	
33.	To promote new technologies in Sericulture among farmers by involving Sericulture department officials.	Assistant Executive Engineer
34.	To organize exposure visit to successful sericulture fields.	Assistant Director of Sericulture
35.	To identify trees those are suited to different areas of the district with economic value.	
36.	To create awareness on Agro forestry	Forestry Department
37.	To send technology information to AIR	
38.	To send information on area wise crops and season wise crops to AIR	
39.	To send weather forecast sourced from TRRI/nearby DAMU centre to AIR	
40.	To conduct farm school on AIR	
41.	To study the reason for poor fruit setting in tree Moringa during Jan – Feb in Aravakurichi area.	
42.	To introduce alternate crops for paddy and also with less pest problems for higher profitability	

43.	To introduce alternative crop for tapioca	
44.	To organize trainingstodouble farmers income	
45.	To create awareness about iluppai tree	

#### 4.0 Capacity Building activities of KVK Staff

Annual training plan (ATP) to be prepared by each KVK for its HRD of staff.

#### 4.1. Plan of Human Resource Development of KVK personnel during 2020-21

S. No	Head/ SMS/Staff	Area of Training	Institution proposed to attend	Duration	Dates (dd/mm/yy)
1	SMS	Alternative cropping system and their maintenance	TNAU	1	
2	SMS	Drought mitigation and advance crop production technologies in Agricultural crops	TNAU	1	
3	SMS	Dryland and rainfed cropping importance and package of practices.	TNAU	1	
4	SMS	Organic cultivation and input preparation of agricultural crops.	TNAU	1	
5	SMS	Recent advances in crop production technologies of all agricultural crops	TNAU	1	
6	SMS	Transfer of technologies effectively by using mass media	ATIC, TNAU, Coimbatore	1	
7	SMS	Development and Management of Agricultural programmes for AIR,	CARDS, TNAU, Coimbatore	1	

		Doordharsan and Print media		
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### 5. Cross-learning across KVKs during 2020-21

S.No.	What expertise/ resources KVK can offer/ share to other KVKs		What you expect from other KVKs	
	Subject area/ resource/ expertise	Mention Other KVK	Subject area/ resource/ expertise	Mention source KVK
1	Seeds processing, Production of bio control agent, Technology adoption in the KVK farm	Trichy, Perambalur	Seeds processing , Production of bio control agent, Technology adoption in the KVK farm	Trichy, Perambalur
2	NICRA Project activities	Chittoor	NICRA Project activities	Chittoor
3	To learn about successful convergence of various development department	Ahmednagar	To learn about successful convergence of various development department	Ahmednagar
4	To visit KrishiMela	Mysore	To visit KrishiMela	Mysore
5	To study about value addition	Bangalore Rural	To study about value addition	Bangalore Rural
6				

### 6. Operational areas details proposed during 2020-21

S.No	Major crops & enterprises	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected	Names of cluster Villages identified for intervention	Proposed intervention
1	Paddy	Low productivity due to cultivation of old paddy variety IR 20 for a long period, sporadic/high incidence of pest and diseases, moisture stress at heading and milking stage. Reduced area of paddycultivation due to less water availability.	1400	Kulithalai, Katanimedu, Kallai and Renganathapuram	OFT, FLD, Training & Extension activities
2	Maize	Low productivity due to high incidence of fall armyworm	500	Nanjakalakurichi	FLD, Training & Extension activities
3	Sorghum	Low yield due to farmers growing locally available seeds for longer period.	7195	Renganathapuram	Training, Extension activities
4	Ragi	Low yield due problem soil ( pH – 8.32 & EC – 2.60 dS/m ) High salt content in irrigation water	10	Chinnapanaiyur	FLD, Training & Extension activities
5	Horsegras	Low productivity due to	850	Kodaiyur	FLD, Training

	m	cultivation of old horsegram variety seeds for longer period. Non adoption of ICM practices			&Extension activities
6	Redgram	Low productivity due to cultivation of locally available seeds for longer period. Poor flowering and pods setting due to moisture stress. High incidence of gram pod borer.	700	Karupathur, Sankaramalaipatti, Punavasipatti, Karuppur, Salaipatti	FLD, Training & Extension activities
7	Black gram	Low yield due to continuous use of ADT 3 and ADT 5 for a longer period. High YMV incidence (more than 60 %) leading to high plant protection cost and reduced income. Lack of awareness about drought tolerant and YMV resistant variety.	850	Kalladai	Training, Extension activities
8	Sesamum	Low yield due to poor germination use of traditional seeds High incidence of pest and diseases. Non availability of good quality seed at right time. Less pod filling percentage.	1500	Karupathur, Punavasipatti, Anjur, Mooknankurichi,	Training, Extension activities
9	Groundnut	Low productivity due to poor germination in seeds of local variety, high pest and disease incidence, low availability of water and moisture stress.	250	Viswanathapur i	Training, Extension activities
10	Cotton	Low productivity due to high incidence of pest and diseases	50	Punjakalakuruchi	FLD, Training & Extension activities
11	Tapioca	Low productivity due to deficiency of micro nutrients in soil, non adoption of ICM practices	500	Karuppur, Punavasipatti, Puthurand Kadambankurich, Koyampalli	OFT, Training & demonstration and Extension activities
12	Flower	Lack of awareness on off season flowering, Micronutrient application, pest and disease management techniques in flower crops.	150	Malaipatti, Karuppur, Kalladai and Sekkanam,	Training and demonstration
13	Tomato	Lack of awareness on high	150	Mooknankurich	OFT-Training

		yielding hybrids, portray methods of propagation, mulching and fertigation, IPM, IDM techniques		i,Kallai, Venjamangoodalur, Kalladai , Punavasipatti, Karuppur,	and demonstration
14	Banana	Low productivity due to adoption of conventional cultivation methods, use of traditional varieties, micronutrient deficiency, incidence of pests and diseases, lack of intercropping and post harvest technology. High cost of production due to high cost of fertilizers, staking in conventional method. Low market value during COVID 19 lockdown.	1500	Rajendram, Inungur, Kottaimedu, Kadambankurichi , Krishnarayapuram and Mahathanapuram,	OFT, Training and demonstration
15	Tuberose	Low productivity due to nematode infestation, weed growth, water scarcity, lack of fertigation techniques	3	Karuppur,Malai patti,Nangavaram, Thogamalai and Pulutheri	Training and demonstration
16	Ixora	Low productivity due to non adoption of ICM practices and high micronutrient deficiency	10	Kalladai , Karaiyampatti, Mudalaipatti, Seethapatti Nangavaram, and Kulithalai	Training and demonstration
17	Moringa	Low productivity due to improper nutrient management, weed growth, pruning techniques and high incidence of pests	750	Venjamangoodalur,Kalladai,K.Paramathi, Punavasipatti,Thogaimalai, Palaviduthi and Karuppur	Training and Demonstration
18	Bitter gourd	Low productivity due to less number of plant population per unit area because of direct sowing and Micronutrient deficiency	75	Mookanankurichi,Nangavaram, Palaviduthi and Thogaimalai,	Training and demonstration
19	Bhendi	Low productivity due to high incidence of yellow vein mosaic virus (YMV) disease, micro nutrient deficiency and pests infestation.	50	Mookanankurichi, Inungur,Venjamangoodalur,Veeranampatti,Palaviduthi, Kallai,	Training and demonstration

				Kulithalai, Karuppur and Punavasipatti	
20	Chillies	Low productivity due to cultivation of local varieties, high incidence of pests and diseases.	150	Venjamangoodalur, Veernampatti, Palaviduthi, Punavasipatti, Velliyanai and Mookanankurichi	Training and demonstration
21	Onion	Low productivity due to cultivation of local varieties. High incidence of onion thrips.	50	Punavasipatti, Venjamangoodalur, Veernampatti, Kallai, Palaviduthi and Karuppur	OFT, Training and demonstration
22	Coconut	Low nut yield due to high incidence of pest and disease problem, lack of drought mitigation techniques and micro nutrient deficiency	1200	Minnampalli, Panchmadevi, Veerarakkiyam and Kadambankurichi	Training and demonstration
23	Jasmine	Low profitability due to high cost of pest and disease management, low market value during COVID 19 lockdown.	150	Sekkanam, Malaipatti, Suriyanur and muthalaipatti	FLD, Training and demonstration
24	Sweet potato	High incidence of Sweet potato weevil.	20	Kallai, veeranampatti, Karuppur and Seethapatti	Training and demonstration
25	Radish	Low yield due to cultivation of local varieties	5	Veeranampatti, Karuppur Palaviduthi, Nangavaram, Thogamalai,	Training and demonstration
26	Betelvine	High incidence of pest and diseases.	120	Karupathur, Velayuthampalayam, Kulithalai and Krishnarayapuram	Training and demonstration
27	Gloriosa Superba	Lack of ICM practices in cultivation	75	Venjamangoodalur	Training and demonstration
28	Turmeric	Incidence of pest and diseases	20	Pallapalayam, Kodaiyur and Karuppur	OFT, Training and demonstration
29	Dairy	Poor nutrient management in cows.	-	Neithalur, puthur, kalladai	Training and demonstration
30	Dairy	Less Knowledge on	-	kelaveliyur	OFT, Training



		reproduction			and Demonstration
31	Dairy	Lack of Knowledge in udder health management	-	Puthur	FLD, Training, camp and demonstration
32	Small Ruminant	Inadequate nutrient management	-	Nagampalli	FLD, Training and Demonstration
33	Small Ruminant	Poor health Management in flocks	-	Punavasipatti, Veeranampatti	Training, Animal Health Camp and demonstration
34	Poultry	Mortality, Poor weight gain, Unavailability of improved strains & Low economic gain, Poor feeding and health Management	-	Vengampatti, Renganathapuram	OFT, FLD - Training and demonstration
35	Post harvest	The available candies in the market are prepared from refined white sugar, that is not very healthy. Water melon is abundantly available during the season and the rind is not utilized. There is unemployment among farm women during summer season.	-	Kumaramangalam	OFT, Training, Extension activities
36	Processing	Banana is cultivated in over 2400 ha. Due to the COVID 19 situation the price of banana has got reduced also frequent strong wind leads to wastage of bunches. There is also prevalence of nutritional deficiency among children and women. Cabinet drying technique of dehydration is expensive and sun drying may lead to fungal contamination as well as poor quality flour.	6255	Rajendram	OFT, Training, Extension activities
37	Mushroom cultivation	Farm women lack entrepreneurship opportunity. Paddy is cultivated in large area and hence paddy straw is available abundantly. The	-	Karuppur	OFT, Training, Extension activities

		children and farm women have nutritional deficiency also.			
38	Value addition	Lack of awareness about therapeutics properties of herbs. Addition of artificial flavours and colouring agents leads to health hazards	-	Punavasipatti	OFT, Training, Extension activities

## 7. Technology Assessment proposed during 2020-21

### 7.1. Summary of OFTs

OFT No.	Source of the Technology	Status of the OFT*	Total no. of trials/ locations	Total cost for the Intervention (Rs.)	Team members
1	TNAU (2019)& TNAU (2014)	New Proposal	3	7230	SMS (Agronomy), SMS (Soil Science), SMS (Home Science) and Senior Scientist and Head
2	TNAU (Farmers innovation)&IIRR	New Proposal	3	4530	SMS (Agronomy), SMS (Soil Science), SMS (Agrl.Extension) and Senior Scientist and Head
3	TNAU (CPG – 2020)&CRIDA, Hyderabad	New Proposal	5	8500	SMS (Agronomy), SMS (Soil Science) and Senior Scientist and Head.
4	CICR – 2015&TNAU – CPG – 2020	New Proposal	3	6480	SMS (Agronomy), SMS (Horticulture), SMS (Agrl.Extension) and Senior Scientist and Head.
5	TNAU-2020&IIHR-2019	New Proposal	3	8190	SMS - Hort,SS&H, PAT
6	TNAU-2020	New Proposal	5	12700	SMS -Horti, HSc, Agrl. Extn, SS&H
7	TNAU 2020&IIHR 2014	New Proposal	3	15690	SMS - Hort, SS&H, PAT
8	TNAU-2013& IISR - 1996	New Proposal	3	17190	SMS -Horti, HSc, Agrl. Extn, SS&H
9	TNAU (2012) &NCOF (2018)	Already Approved	3	5640	SMS (Soil Science), SMS (Agronomy) and Senior Scientist and Head

10	TNAU (2012)&TNAU (2014)	Already Approved	5	6850	SMS (Soil Science), SMS (Agronomy) and Senior Scientist and Head
11	TNAU CPG 2020&CTCRI – 2017	New Proposal	3	10050	SMS (Soil Science), SMS (Horticulture) and Senior Scientist and Head
12	TNAU CPG 2020&CRIDA – 2017	New Proposal	5	6150	SMS (Soil Science), SMS (Agronomy) and Senior Scientist and Head
13	(ICAR-IIMR, Ludhiana/ DPPS&Q)	New Proposal	3	6300	Farm Manager and Senior Scientist and Head
14	(SAUs: TNAU/Dr YSRHU& NBAIR), 2019	New Proposal	3	6600	Farm Manager and Senior Scientist and Head
15	TNAU CPG - 2020 &NBAIR 2019	New Proposal	3	8250	Farm Manager and Senior Scientist and Head
16	NBAIR 2018&TNAU – 2015	New Proposal	3	8850	Farm Manager and Senior Scientist and Head
17	TNAU Agritech Portal	New proposal	25	2500	SMS(Agrl.Extension) &PA (Lab Technician)
18	Farmer Innovation – 2019 &TNAU – 2016	New proposal	3	15000	SMS(Agrl.Extension) &PA (Lab Technician)
19	TANUVAS – TRPVB 2017	Already approved	10	11800	SMS (Animal Science), SMS (Home Science) and Senior Scientist and Head
20	TANUVAS – 2019	Already approved	10	9100	SMS (Animal Science), SMS (Agrl extension) and Senior Scientist and Head
21	TNAU2018 and TNAU(2015)	New proposal	3	24500	SMS (Home Science), SMS (Horti) and Senior Scientist and Head
22	TNAU (2013) and TNAU (2010)	New proposal	3	4025	SMS (Home Science), SMS (Horti) and Senior Scientist and Head
23	UAS Dharward ,	New	3	6500	SMS (Home

	2015 and TNAU2015	proposal			Science) and Senior Scientist and Head
24	IIHR 2011 and TNAU2016	New proposal	3	7500	SMS (Home Science), Farm Manager and Senior Scientist and Head

## 7.2. Details of OFTs

OFT No.	1						
Crop/ enterprise	Paddy						
Prioritized problem	Paddy is cultivated in about 8700 ha of land in the district. Majority of the farmers are cultivating BPT 5204 and IR 20 these varieties is old released, low yielding and susceptible various pest and diseases. Increase the production cost for use of more spray plant protection chemicals.						
Title of intervention	<b>Assessment of ADT 53 paddy variety in karur district</b>						
Technology options							
TO-1	Paddy - ADT – 53 - Paddy ADT 53 released by TNAU in 2019; parentage: ADT 43 / JGL 384, duration : 105- 110 days, high yielding , medium tall and erect variety, grain yield : 6334 kg / ha, non lodging plant type with well exerted compact panicle, 1000 grain weight : 14.5 g, medium slender rice with high milling outturn and head rice recovery, rich in zinc (26.06 ppm) and iron (14.70 ppm) content, white cooked rice with intermediate amylose and soft gel consistency, moderate resistance to pests viz., stem borer, leaf folder and diseases viz., blast, sheath rot and brown spot, highly adaptable to all ecosystems of Tamil Nadu.						
TO-2	Paddy CO 51 released by TNAU in 2014; parentage ADT 43 / RR 272 – 1745, duration 105 -110 days, grain yield 6623 kg/ha (11% increase over ADT 43), moderately resistant to blast, brown plant hopper and green leaf hopper, white medium slender rice with high milling (69%) and head rice recovery (63%), Intermediate amylose content (22%), gelatinization temperature and soft gel consistency.						
FP	IR 20 - Parentage – IR 262 X TKM 6, duration (Days) – 130 – 135, average yield (Kg/ha) – 5000, 1000 grain weight (g) – 19, Grain type – medium slender, habit – semi-dwarf, rice color – white, special features – resistant to stem borer.						
Source of Technology							
TO-1	TNAU (2019)						
TO-2	TNAU (2014)						
Status	New Proposal						
Name of critical input	<b>Paddy ADT 53 seed</b>	<b>Paddy CO 51 seed</b>	<b>Azospirillum</b>	<b>Phosphobacteria</b>	<b><i>Pseudomonas fluorescence</i></b>	<b><i>Trichoderma viride</i></b>	<b>Field board</b>
Qty per trial	30 kg	30 kg	1 kg	1 kg	1 kg	1 kg	1 No
Cost per trial (Rs.)	900	900	60	60	120	120	250
No. of trials	3						
Total cost (Rs.)	7230						
Parameters to be studied	Plant growth parameters, Grain and straw yield, Incidence of pests and diseases, BCR and Cooking quality for market preference						
Team members	SMS (Agronomy), SMS (Soil Science), SMS (Home Science) and Senior Scientist and Head						

OFT No.	2						
Crop/ enterprise	Paddy						
Prioritized problem	Paddy is cultivated under lowlands using lift irrigation in about 500 ha in Thogaimalai block in years when there is sufficient rainfall. Farmers take up only flood irrigation thereby water use efficiency is low. Moreover there are problems of weeds, pests and diseases due to flood irrigation. This results in high cost of cultivation. Due to limited supply in bore wells, farmers limit paddy cultivation area. Hence drip irrigation technology in paddy cultivation will solve the above problems and increase the productivity.						
Title of intervention	<b>Assessment of drip irrigation techniques in paddy</b>						
Technology options							
TO-1	<p>Drip Irrigation - Irrigation was given through PVC pipe after filtering through the screen filter by 7.5 HP motor from the bore well. The pressure maintained in the system was 1.2 kg cm<sup>-2</sup> . From the sub-main, in-line laterals were laid out of 16 mm at a spacing of 0.6 m with 2.4 lph discharge rate emitter position at a distance of 40 cm. Irrigation frequency is scheduled based on tensiometer observation.</p> <p>Advantages of drip irrigation in paddy are:</p> <ul style="list-style-type: none"> <li>• Water use efficiency increased by 28-32</li> <li>• Leaching loss of nutrients is prevented</li> <li>• Control of weeds and labour cost reduced by 40 %</li> <li>• Good soil health is maintained which helps in quality</li> </ul> <p>Power saving by 36 %</p>						
TO-2	<p>Alternative wetting and Drying (AWD) – SRI – PaaniPipe -IRRI has introduced a precise water management (AWD system) in rice very economically using Pani Pipe method. It is actually the smart modification of AWD system in rice specially aiding the farmers in taking decision that how much and when to irrigate the crop so that the efficiency Increases as well as yield remain sustained or enhanced.</p> <p>Pani pipe - AWD system is to alternatively make the field flooded and aerated to reduce the water requirement as well as boost the yield. But it often seems to be difficult to schedule the water in right time and right amount in AWD system. Pani Pipe method is actually the modification of AWD system to indicate proper scheduling of irrigation water in AWD system. It is a PVC, or HDPE made cylinder with a length of about 300-400 mm. The diameter should be in the range of 100-150 mm so that the water table inside can be easily visualised and during installation, the soil remaining inside the pipe can be removed easily. In the lower 150-200 mm or in the lower half, several holes are drilled to facilitate easy movement of water to the soil. It is very easy to make the instrument in home by the farmers.</p>						
FP	Conventional flood irrigation - Water should be kept standing in the field throughout the growth period at 2.5 cm height.						
Source of Technology							
TO-1	TNAU (Farmers innovation)						
TO-2	IIRR						
Status	New Proposal						
Name of critical input	<b>Paddy seed</b>	<b>AWD (Paani pipe)</b>	<b>Azospirillum</b>	<b>Phosphobacteria</b>	<i>Pseudomonas fluorescense</i>	<i>Trichoderma viride</i>	<b>Field Board</b>
Qty per trial	15 kg	1 no	1 kg	1 kg	1 kg	1 kg	1 no

Cost per trial (Rs.)	600	300	60	60	120	120	250
No. of trials	3						
Total cost (Rs.)	4530						
Parameters to be studied	Plant growth parameters, Water use efficiency (Water saving), Moisture index ,Weed population, Grain and Straw yield, Incidence of pests and diseases and BCR						
Team members	SMS (Agronomy), SMS (Soil Science), SMS (Agrl.Extension) and Senior Scientist and Head						

OFT No.	3			
Crop/ enterprise	Groundnut			
Prioritized problem	Low yield due to moisture stress at flowering and pod formation stages.			
Title of intervention	<b>Assessment of PPFM drought management in groundnut</b>			
Technology options				
TO-1	TNAU Groundnut rich + TNAU - PPFM - TNAU Groundnut rich - To increase flower retention, pod filling and to induce drought tolerance apart from yield improvement, 2 sprays of TNAU groundnut rich @ 5.0 kg/ha (for each spray) at 35 DAS ( 50 per cent flowering) and 45 DAS (Pod developing stage) in 500 litres of water is recommended. TNAU PPFM - Use of PPFM-Pink Pigmented Facultative Microbes (foliar spray@ 500 ml/ha at pre flowering and pod development stages) for mitigation of mid/terminal drought is recommended.			
TO-2	CRIDA - Bacterial consortia - Two bacterial consortia (P7+B30+G12 and P45+B17+G12) were formulated and tested in lab and field conditions for drought and heat stress management. Use of recommended NPK with consortium inoculation improved plant growth and yield of groundnut under rainfed conditions.			
FP	No Spray			
Source of Technology				
TO-1	TNAU (CPG – 2020)			
TO-2	CRIDA, Hyderabad			
Status	New Proposal			
Name of critical input	<b>TNAU – Groundnut rich</b>	<b>TNAU – PPFM</b>	<b>CRIDA – Bacterial Consortia</b>	<b>Field Board</b>
Qty per trial	2.5 kg	1 lit	1 lit	1
Cost per trial (Rs.)	550	300	600	250
No. of trials	5			
Total cost (Rs.)	8500			
Parameters to be studied	Plant growth parameters, moisture index, Drought withstand period , Yield and Economics			
Team members	SMS (Agronomy), SMS (Soil Science) and Senior Scientist and Head.			

OFT No.	4								
Crop	Cotton (Inter cropping)								
Prioritized problem	Farmers are lacking awareness about intercropping with cotton; cotton is long duration crop farmers are waiting to income longer duration. Low productivity due to high incidence of pest and diseases in cotton. To overcome the effects of higher production cost and low income, it is proposed to conduct the present assessment.								
Title	<b>Assessment of suitable inter cropping for cotton</b>								
Technology options									
TO-1	Cotton inter cropping with Radish / Beetroot - The cotton intercropping with high valuable vegetable in alternate paired row with radish and beetroot for higher income, Periodical harvest of intercrops radish (45 DAS), and beetroot (75 DAS), leads to less competition within the component crops which ultimately resulted in higher seed cotton yield with Cotton+ radish /beetroot system.								
TO-2	Cotton inter cropping with Black gram – VBN – 8 - Cotton planted in paired rows and intercropped with blackgram resulted in increased yield, Intercropping blackgram with cotton reduces weed incidence, pest incidence and as a result the yield attributes is increased which finally result in increased seed cotton yield								
FP	Cotton sole crop								
Source of Technology									
TO-1	CICR - 2015								
TO-2	TNAU – CPG - 2020								
Status	New Proposal								
Name of critical input	<b>Radish</b>	<b>Beetroot</b>	<b>Blackgram VBN 8</b>	<b>Rhizobium</b>	<b>Phosphobacteria</b>	<b>Pseudomonas fluorescens</b>	<b>Trichoderma viride</b>	<b>TNAU Pulse wonder</b>	<b>Field Board</b>
Qty per trial	2 kg	1 kg	4 kg	1 kg	1 kg	1 kg	1 kg	2.5 kg	1
Cost per trial (Rs.)	400	200	400	60	60	120	120	550	250
No. of trials	3								
Total cost (Rs.)	6480								
Parameters to be studied	Inter crops growth parameters, Yield and Economics								
Team members	SMS (Agronomy), SMS (Horticulture), SMS (Agri.Extension) and Senior Scientist and Head.								

OFT No.	5						
Crop/ enterprise	Tomato						
Prioritized problem	Low production due to incidence of diseases						
Title	<b>Assessment of new high yielding hybrids in tomato</b>						
Technology options							
TO-1	Tomato hybrid CO 4 - The tomato hybrid (CO 4) is known to produce 27% higher fruit yield than other hybrids, besides having long shelf-life and high acidity.						
TO-2	<i>Arka Abhed</i> - High yielding F <sub>1</sub> hybrid with multiple disease resistance to Tomato Leaf Curl Disease ( <i>Ty2+Ty3</i> ), Bacterial wilt, Early blight and Late blight ( <i>Ph2 + Ph3</i> ) Plants are semi-determinate with dark green foliage, Fruits are firm, oblate round & medium large (90-100g). Suitable for summer, <i>kharif</i> & <i>rabi</i> cultivation . Bred for fresh market.						
FP	-						
Source of Technology							
TO-1	TNAU-2020						
TO-2	IIHR-2019						
Status	New proposal						
Name of critical input	<b>Seeds (Co 4)</b>	<b>Seeds (Arka Abhed)</b>	<b>Micro nutrient mixture</b>	<b>Azospirillum</b>	<b>Phosphobacteria</b>	<b><i>Pseudomonas fluorescens</i></b>	<b>Field board</b>
Qty per trial	30 g	30 g	2 kg	1Kg	1Kg	2 kg	1 no
Cost per trial (Rs.)	900	900	320	60	60	240	250
No. of trials	3						
Total cost (Rs.)	8190						
Parameters to be studied	Fruit weight, Cooking Parametres, % incidences of pests and diseases, Yield, BCR						
Team members	SMS - Hort,SS&H, PAT						

OFT No.	6						
Crop/ enterprise	Banana						
Prioritized problem	Low yield , Non availability of high yielding varieties						
Title of intervention	<b>Assessment of new high yielding Banana varieties</b>						
Technology options							
TO-1	To1-CO 2 – <ul style="list-style-type: none"> <li>➤ CO.2 banana (AB) is a seedling selection made from the progenies derived from the cross combination of Karpooravalli (ABB) x PisangLilin (AA) (resistant source for nematode).</li> <li>➤ Has tolerance to nematodes, lesser incidence of Sigatoka leaf spot and <i>Fusarium</i> wilt.</li> <li>➤ Resembles the commercial cv. Ney Poovan (susceptible to nematode wilt complex) in bunch appearance, finger shape, size and bunch weight.</li> <li>➤ Average bunch weight is 12-13 kg with 12-14 hands/bunch and 150-160 fingers/bunch.</li> <li>➤ Yield potential is 32 tonnes/ha.</li> <li>➤ Fruits have sub acid taste with acceptable blend of sugar and acid (TSS 24-</li> </ul>						



	<p>26<sup>0</sup> Brix).</p> <ul style="list-style-type: none"> <li>➤ Crop duration is 12-13 months (planting to harvest).</li> <li>➤ Suitable for planting during October to January.</li> <li>➤ Propagated by suckers; planted at a spacing of 1.8 m x 1.8 m and requires propping upon shooting.</li> </ul> <p>Recommended for cultivation in Coimbatore, Erode, Theni, Trichy and Kanyakumari districts of Tamil Nadu.</p>			
Source of Technology				
TO-1	TNAU-2020			
Status	New proposal			
Name of critical input	<b>Banana Suckers</b>	<b>Banana Special</b>	<i>Pseudomonas fluoresces</i>	<b>Field board</b>
Qty per trial	100nos	3kg	2kg	1 no
Cost per trial (Rs.)	1000	480	240	250
No. of trials	5			
Total cost (Rs.)	12700			
Parameters to be studied	No. of hands per plant, Yield per plant(Kg), Pests and diseases incidence (%), Yield q/ha, BCR			
Team members	SMS -Horti, HSc, Agri. Extn, SS&H			

OFT No.	7
Crop	Onion
Prioritized problem	High pest, disease Incidence and low yield in local varieties
Title of intervention	<b>Assessment of new high yielding Onion Hybrids</b>
Technology options	
TO-1	<ul style="list-style-type: none"> <li>• CO6 Onion is a free flowering and seed setting throughout Tamil Nadu.</li> <li>• Bulb yield :19.10 tonnes / ha ; Seed yield: 250- 300 kg/ ha</li> <li>• It recorded 20.94 % increase over the check CO(On) 5.</li> <li>• The bulbs are bolder in size with attractive pink in colour.</li> <li>• Each clump has 5 - 7 bulbs and each clump weighs 90-100 g.</li> <li>• For seed to bulb it takes 130 days and bulb to seed it takes 140 days duration.</li> <li>• The bulb has a TSS of 15.4<sup>0</sup> brix and ascorbic acid content of 10.8 mg/100 g.</li> </ul> <p>CO6 onion is adaptable to fertile loamy soils of Tiruppur, Perambalur, Namakkal Cuddalore, and Coimbatore districts of Tamil Nadu under irrigated condition.</p>
TO-2	ArkaUjjwal - It is a multiplier onion variety with uniform bright dark red bulb color, compound bulb with flat shape ,bulb size 4-5cm,number of bulblets/bulb 3-5, bulb weight 40-45g, TSS 16-18%,dry matter content 14-16% and bulb yield 20-25t/ha in 85 days.
TO-3	CO 5 -Onion is a high yielding variety developed by mass pedigree method of selection. This variety has the ability of free flowering and seed set throughout Tamil Nadu. It possess high bulb yield 18.9 t/ha (18.8 per cent higher than CO.4) in a crop duration of 90 days. It is free flowering type with seed setting ability of 250-300 kg/ha and so it is propagated through seeds. March–July for bulb production and November– January for seed production. It possesses attractive pink coloured bold size bulbs. The total soluble solids content is 13 per cent. The pungency principal measured as pyruvic acid is 2.37 µm/g of fresh weight. It is adaptable to Coimbatore, Trichy, Pudukottai, Nagapattinam, Thanjavur, Tiruvarur, Theni, Madurai, Namakkal, Cuddalore, Tiruvannamalai,

	Thoothukudi, Erode and Dharmapuri districts.						
Source of Technology							
TO-1	TNAU 2020						
TO-2	IIHR 2014						
Status	New proposal						
Name of critical input	Seed CO 6 @ 3kg /ha	Seed ArkaUjjwal @ 3kg /ha	Seed CO 5 @ 3kg /ha	<i>Azospirillum</i>	<i>Phosphobacteria</i>	<i>Pseudomonas fluorescens</i>	Field Board
Qty per trial	600g	600g	600g	2kg	2kg	2kg	1 no
Cost per trial (Rs.)	1500	1500	1500	120	120	240	250
No. of trials	3						
Total cost (Rs.)	15690						
Parameters to be studied	No of bulb/ cluster, Bulb yield/ha, Quality parameters,Percent incidence of pests and diseases,BCR						
Team members	SMS - Hort, SS&H, PAT						

OFT No.	8						
Crop/ enterprise	Turmeric						
Prioritized problem	Low yield due to cultivation of local varieties.						
Title	<b>Assessment of new high yielding Turmeric Variety CO2</b>						
Technology options							
TO-1	CO2 – <ul style="list-style-type: none"> <li>High curcumin content (4.02%), highly resistant to rhizome rot, field tolerant to thrips, shoot borer, leaf folder &amp; scale insects</li> <li>Duration - 250-260</li> </ul> Yield - 42 tonnes fresh rhizome /ha						
TO-2	Prathibha						
Source of Technology							
TO-1	TNAU-2013						
TO-2	IISR - 1996						
Status	New proposal						
Name of critical input	Seeds (Co 2)	Seeds (Prathibha)	<i>Azospirillum</i>	<i>Phosphobacteria</i>	<i>Pseudomonas fluorescens</i>	<i>T. viride</i>	Field board
Qty per trial	50kg	50kg	2Kg	2Kg	1 kg	1kg	1 no
Cost per trial (Rs.)	2500	2500	120	120	120	120	250
No. of trials	3						
Total cost (Rs.)	17190						
Parameters to be	Rhizome Weight, Curcumin content, pests and diseases incidence, Rhizome Yield/ha,						

studied	Curcumincontent,BCR
Team members	SMS -Horti, HSc, Agri. Extn, SS&H

OFT No.	9				
Crop/ enterprise	Redgram				
Prioritized problem	Long time to compost Lack of availability of manure Increasing cost of production				
Title of intervention	<b>Assessment of different decomposers in Redgram (Co 8) crop residue composting (DFI Village)</b>				
Technology options					
TO-1	Composting with Microbial consortium - Composting with TNAU Microbial consortium Urea -5 kg, Rock phosphate-10 kg, Pleurotus-2kg, (Bacillus + Trichoderma sp + Pseudomonas sp) 2kg				
TO-2	Composting with waste decomposer - 200 lit/ton of residue				
FP	Natural composting				
Source of Technology					
TO-1	TNAU (2012)				
TO-2	NCOF (2018)				
Status	Already approved OFT - 2 <sup>nd</sup> year				
Name of critical input	<b>Rockphosphate</b>	<b>Microbial consortium</b>	<b>waste decomposer</b>	<b>Pleurotus</b>	<b>Field Board</b>
Qty per trial	20 kg	10 kg	2 boxes	2kg	1
Cost per trial (Rs.)	300	1000	80	250	250
No. of trials	3				
Total cost (Rs.)	5640				
Parameters to be studied	Maturity index (C:N ratio)Nutrient content , Org. carbon; N,P,K				
Team members	SMS (Soil Science), SMS (Agronomy) and Senior Scientist and Head				

OFT No.	10				
Crop/ enterprise	Paddy				
Prioritized problem	Low productivity ( Average yield 4780 kg/ha) High cost of production Low Organic Carbon – 0.4%				
Title of intervention	<b>Assessment of Organic Nutrient Management in Rice cultivation (CO51)</b>				
Technology options					
TO-1	Green manure + STCR NPK + Bio Fertilizer <ul style="list-style-type: none"> <li>Organic:Incorporation of green manure – Daincha 20 kg/ha at pre flowering stage</li> <li>Seed treatment with 3% Panchagavya.</li> <li>Basal application of EFYM comprising 750 kg/ha FYM + 100 kg rock phosphate + neem cake 200 kg/ha + biofertilizer Azospirillum 2 kg/ha + Phosphobacteria 2 kg/ha</li> <li>Top dressing of vermicompost @ 1 MT/ha at maximum tillering stage.</li> </ul> Foliar spray of 3% panchagavya spray twice at active tillering and panicle initiation				
TO-2	INM - Green manure + Soil Test based NPK+ Bio fertilizers				

FP	Green manure + Chemical fertilizers				
Source of Technology					
TO-1	TNAU (2012)				
TO-2	TNAU (2014)				
Status	Already approved OFT - 2 <sup>nd</sup> year				
Name of critical input	<b>Rockphosphate</b>	<b>Bio fertilizers</b>	<b>Green manure</b>	<b>Panchakavya</b>	<b>Field Board</b>
Qty per trial	30 kg	4kg	8 kg	3 lit	1
Cost per trial (Rs.)	300	240	340	240	250
No. of trials	5				
Total cost (Rs.)	6850				
Parameters to be studied	Plant growth parameters, Pre and post soil analysis, Grain and Straw yield, Incidence of pests and diseases, BCR				
Team members	SMS (Soil Science), SMS (Agronomy) and Senior Scientist and Head				

OFT No.	11		
Crop/ enterprise	Tapioca		
Prioritized problem	Low productivity due to deficiency of micro nutrients in soil , non adoption of ICM practices		
Title of intervention	<b>Assessment of performance of foliar based micronutrient mixture for yield enhancement in Tapioca</b>		
Technology options			
TO-1	TNAU Cassava booster 12.5 kg /ha - Foliar spraying of TNAU Cassava booster @ 12.5 kg/ha at 30, 60, 90 DAP		
TO-2	Cassava special @ 5g/litre - Foliar application of Cassava special @ 5g/ litre @ 2,3 & 4 MAP		
FP	No spray -Commercial micronutrient mixture is applied as recommended by Input dealer.		
Source of Technology			
TO-1	TNAU CPG 2020		
TO-2	CTCRI - 2017		
Status	New proposal		
Name of critical input	<b>TNAU Cassava booster and</b>	<b>Cassava special</b>	<b>Field Board</b>
Qty per trial	5 kg	4 kg	1
Cost per trial (Rs.)	1500	1600	250
No. of trials	3		
Total cost (Rs.)	10050		
Parameters to be studied	Pre and post soil analysis, Number of tubers / plant Tuber weight/plant, Yield and BCR		
Team members	SMS (Soil Science), SMS (Horticulture) and Senior Scientist and Head		

OFT No.	12		
Crop/ enterprise	Red gram		
Prioritized problem	Low yield due to imbalanced nutrient application and high deficiency of micronutrient cause pest and disease Lack of bio product residues management practice. Air pollution and Bio wastes are burn in field		

Title of intervention	<b>Assessment of biochar for soil fertility improvement in Redgram (Co(Rg)7)</b>		
Technology options			
TO-1	Application of biochars and bio fertilizers - Production of biochar from redgram crop residues. Biochar @ 1 MT/ha is finely ground into powder and it is basally applied. Application of biofertilizers – Rhizobium and Phosphobacteria @ 2 kg/ha each.		
TO-2	Application of TNAU micronutrient mixture and bio fertilizers <ul style="list-style-type: none"> <li>• Soil application of biofertilizers – Azospirillum &amp; Phosphobacteria @ 2 kg/ha</li> <li>• Basal application of 12.5 kg N + 25 kg P<sub>2</sub>O<sub>5</sub> + 12.5 kg K<sub>2</sub>O + 10 kg S/ha</li> </ul> Soil application of TNAU micronutrient mixture @ 5 kg/ha		
FP	Without application of MN and biochar		
Source of Technology			
TO-1	TNAU CPG 2020		
TO-2	CRIDA - 2017		
Status	New proposal		
Name of critical input	<b>Bio fertilizers</b>	<b>TNAU MN mixture</b>	<b>Field Board</b>
Qty per trial	8 kg	5 kg	1
Cost per trial (Rs.)	480	500	250
No. of trials	5		
Total cost (Rs.)	6150		
Parameters to be studied	Pre and post soil analysis , growth parameters, Yield and Economics		
Team members	SMS (Soil Science), SMS (Agronomy) and Senior Scientist and Head		

OFT No.	13
Crop/ enterprise	Maize
Prioritized problem	Invasive insect pest <i>Spodoptera frugiperda</i> reduced the maize yield by more than 50%. The area being rainfed , management of FAW was found difficult.
Title of intervention	<b>Assessment of management module against Maize Fall Army worm</b>
Technology options	
TO-1	Summer ploughing ; Seed treatment Fortenza duo (Cyantraniliprole + Thiamethoxam) @ 4ml/kg ; Collection & Destruction of egg masses; setting up of Pheromone traps ( <i>S. frugiperda</i> ) @ 4 nos/ac; Cultivation of Border crop with grain sorghum & inter crop with cowpea (few rows); Application of Azadirachtin 10000ppm @ 2ml/lt (10 to 15 DAS) followed by EPN or Bt spray @ 2 ml/lt (15 to 21 DAS); First insecticide spray - Emamectin Benzoate 5SG @ 0.4g/lt (or) Spinosad 480SC @ 0.5 ml/lt (21-28 DAS); <i>Metarhiziumanisopliae</i> spray ( $1 \times 10^7$ ) @ 2 ml/lt (30 -35DAS) Second Insecticide spray - Flubendiamide 480SC @ 0.3 ml/lt (or) Chlorontriliniprole 18.5SC @ 0.3ml/lt or Spinetoram 11.7 SC @

	0.3 ml/lit (36 – 42 DAS) Poison Baiting – 45 -65 DAS using Thiodicarb 75WP				
FP	Spraying of Insecticides – after noticing the FAW incidence				
Source of Technology					
TO-1	(ICAR-IIMR, Ludhiana/ DPPS&Q)				
Status	New Proposal				
Name of critical input	<i>Metarhizium anisopliae</i>	Pheromone traps	Grain sorghum & Cowpea seeds	Azadirachtin 10000 ppm	Field Board
Qty per trial	2lit	5 nos	500 g	1lit	1
Cost per trial (Rs.)	750	400	100	600	250
No. of trials	3				
Total cost for the Intervention (Rs.)	6300				
Parameters to be studied	Percent pest damage; Yield ; BCR				
Team members	Farm Manager and Senior Scientist and Head				

OFT No.	14				
Crop/ enterprise	Coconut				
Prioritized problem	Invasive insect pest RSW reduces the coconut yield. As the district has over 6700 ha under coconut, the RSW is considered as a threat. With the occurrence of drought, the RSW could be more serious.				
Title of intervention	<b>Assessment of management module against Coconut Rugose spiralling Whitefly</b>				
Technology options					
TO-1	Installation Yellow sticky traps 3 x 1.5ft @ 10nos/ac Release of <i>Chrysoperlazastrawisilemmi</i> Predator @ 400 nos/ac at 15 days interval; Release of <i>Encarsiaguadeloupaeparasitoids</i> @ 10 bits of leaflets 2.5 cm length containing parasitized pupae; Spraying neem based formulations (Azadirachtin 1% @ 2 ml/lit ) along with wetting agent or detergent powder @ 10g/lit at 20 days interval; Spraying of 1% starch solution for sooty mould Avoid spraying of chemical insecticides				
FP	Spraying of Insecticides				
Source of Technology					
TO-1	(SAUs: TNAU/Dr YSRHU& NBAIR), 2019				
Status	New Proposal				
Name of critical input	<i>Encarsiaguadeloupaeparasitoid</i>	<i>Chrysoperlazastrawisilemmi</i>	Yellow sticky traps	Azadirachtin	Field Board
Qty per trial	10 bits	400	10nos	2 ml/lit	1
Cost per trial (Rs.)	300	300	750	600	250
No. of	3				

trials	
Total cost (Rs.)	6600
Parameters to be studied	Percent pest incidence, Yield, BCR
Team members	Farm Manager and Senior Scientist and Head

OFT No.	15			
Crop/ enterprise	Brinjal			
Prioritized problem	Severe yield loss (over 50%) due to incidence of fruit and shoot borer. Indiscriminate application of insecticides poses serious problem of pesticide residue, high cost of plant protection and pest resistance.			
Title of intervention	<b>Assessment of fruit and shoot borer management in Brinjal</b>			
Technology options				
TO-1	TNAU IPM Module: Crop sanitation. <i>Trichogramachilonis</i> @ 50,000/week/ha; Spray Neem Seed Kernel Extract 5 % ; Need based chemicals insecticide spray of Emamectin benzoate 5 % SG @ 4g/10 lit or Flubendiamide 20 WDG ; @ 7.5g/10 lit of water from one month after planting at 15 days interval			
TO-2	Mass trapping with NBAIR pheromone traps (water type) 15 per ac to be set after first week of planting			
FP	Weekly application of insecticides.			
Source of Technology				
TO-1	TNAU CPG - 2020			
TO-2	NBAIR 2019			
Status	New Proposal			
Name of critical input	<b>Pheromone traps</b>	<b>Trichogramachilonis</b>	<b>Neem Seed Kernel Extract 5%</b>	<b>Field Board</b>
Qty per trial	15/ac	50000/week		1
Cost per trial (Rs.)	1200	800	500	250
No. of trials	3			
Total cost (Rs.)	8250			
Parameters to be studied	Percent pests damage; Yield ; BCR			
Team members	Farm Manager and Senior Scientist and Head			

OFT No.	16			
Crop	Jasmine			
Prioritized problem	Severe yield loss (over 30%) due to Incidence of jasmine budworm and also low market price due to poor flower quality. Indiscriminate application of insecticides (weekly 1 – 2 times) poses serious problem of pesticide residue, high cost of plant protection and pest resistance.			
Title	<b>Assessment of technology module against Jasmine Budworm</b>			
Technology options				
TO-1	Spray with <i>Beauveria bassiana</i> (NBAIR formulation) @ 5 g per lit. of water			

	three times along with six release of <i>Trichogramma chilonis</i> @ 1,00,000/ha and <i>Chrysoperlazastrowisillemi</i> @ 4 – 5 grubs per plant @ 7 days interval from bud initiation stage				
TO-2	Installation of light traps 1/acre, Spray neem seed kernel extract 5 % Spray of <i>Beauveria bassiana</i> 2 g/litre.				
FP	Twice in a week application of insecticides.				
Source of Technology					
TO-1	NBAIR 2018				
TO-2	TNAU – 2015				
Status	New Proposal				
Name of critical input	<b>Beauveria bassiana</b>	<i>Trichogramma chilonis</i> and <i>Chrysoperlazastrowisillemi</i>	<b>Light trap</b>	<b>NSK E 5%</b>	<b>Field Board</b>
Qty per trial	2kg	1,00,000/ha	1		1
Cost per trial (Rs.)	400	300	1500	500	250
No. of trials	3				
Total cost for the Intervention (Rs.)	8850				
Parameters to be studied	Percent pest damage, Yield, BCR				
Team members	Farm Manager and Senior Scientist and Head				

OFT No.	17
Crop/ enterprise	Agri.& Horti crops
Prioritized problem	Due to the COVID 19 lockdown, there is problem for reaching out to farmers. Under such situations use of mKisan and social media such as WhatsApp and Facebook have been helpful to reach out to large number of farmers.
Title of intervention	<b>Assessment of Social media Facebook for dissemination of information to farmers</b>
Technology options	
TO-1	Facebook - Providing periodic advisories to 25 coconut farmers on ICM practices and marketing aspects including supply and value chain management
TO-2	WhatsApp group – Providing periodic advisories to 25 coconut farmers on ICM practices and marketing aspects including supply and value chain management
FP	SMS Providing periodic advisories to 25 coconut farmers on ICM practices and marketing aspects including supply and value chain management



Source of Technology	
TO-1	TNAU Agritech Portal
TO-2	TNAU Agritech Portal
Status	New proposal
Name of critical input	Multicolour user guide leaflet
Qty per trial	-
Cost per trial (Rs.)	1000
No. of trials	5 (5 farmers per location)
Total cost for the Intervention (Rs.)	5000
Parameters to be studied	Knowledge level & Adoption level
Team members	SMS(Agrl.Extension) &PA (Lab Technician)

OFT No.	18
Crop/ enterprise	Redgram
Prioritized problem	Redgram is cultivated in over 3500 ha in Karur district mostly under rainfed situation. The seeds are broadcasted in the field and this results in dense planting. Further this results in lesser branching and higher incidence of pests.
Title of intervention	<b>Assessment of farmer innovation – Tractor drawn multicrop seeder in Redgram</b>
Technology options	
TO-1	Tractor drawn multicrop seeder (Balram seeder) (Six rows; Coverage – 1 ha per day)
TO-2	Tractor drawn precision pulse seeder (Five rows; Coverage – 1 ha per day)
FP	Conventional method
Source of Technology	
TO-1	Farmer Innovation – 2019
TO-2	TNAU - 2016
Status	New proposal
Name of critical input	TNAU Pulse seeder Tractor drawn multicrop seeder
Qty per trial	
Cost per trial (Rs.)	5000/- (hiring charges)
No. of trials	3
Total cost for the Intervention (Rs.)	15000
Parameters to be studied	Crop establishment percentage, area coverage and BCR
Team members	SMS(Agrl.Extension) &PA (Lab Technician)

OFT No.	19
Crop/ enterprise	Dairy
Prioritized problem	Animal those are not conceiving three normal Artificial insemination considered as repeat breeding cows. Infertility due to repeat breeding is caused by several factors such as deficiency of minerals, nutritional imbalance, poor management practices, poor quality semen and diseases.
Title of intervention	<b>Assessment of Prosynch – NF technology in augmenting</b>

	<b>fertility through estrus synchronization</b>				
Technology options					
TO-1	Oestrus induction using nano progesterone - Prosynch – NCF to be preceded by deworming and mineral supplementation				
TO-2	Oestrus induction using nano progesterone - Prosynch – NC to be preceded by deworming and mineral supplementation				
FP	Artificial insemination during natural estrus				
Source of Technology					
TO-1	TANUVAS – TRPVB 2017				
TO-2	TANUVAS – TRPVB 2017				
Status	Already approved				
Name of critical input	<b>Prosync-NF</b>	<b>Prosync-NC</b>	<b>Deworming tablet</b>	<b>Mineral mixture</b>	<b>Field Board</b>
Qty per trial	1	1	1	1	1
Cost per trial (Rs.)	400	350	70	110	250
No. of trials	10				
Total cost for the Intervention (Rs.)	11800				
Parameters to be studied	Pregnancy %, induction %, BCR				
Team members	SMS (Animal Science), SMS (Home Science) and Senior Scientist and Head				

OFT No.	20		
Crop/ enterprise	Sheep		
Prioritized problem	Mineral deficiency in sheep leads to low weight gain. Lack of awareness on mineral supplementation.		
Title of intervention	<b>Assessment of AFTD (Aerated film dry technologies) salt in mineralized salt lick in sheep</b>		
Technology options			
TO-1	Incorporation of AFTD (Aerated film dry technologies) salt in mineralized salt lick - Dosage of 4 kg per 10 lambs for 90 days after weaning.		
TO-2	NTANP Small ruminant mineral mixture 15g daily along with concentration feed		
FP	NaCl feeding		
Source of Technology			
TO-1	TANUVAS –2019		
TO-2	TANUVAS – 2019		
Status	Already approved		
Name of critical input	<b>AFTD (Aerated film dry technologies) salt in mineralized salt lick</b>	<b>Small ruminant mineral mixture (NIANP)</b>	<b>Field Board</b>
Qty per trial	3 Nos	3 Kg	1 no
Cost per trial (Rs.)	210	450	250
No. of trials	10		
Total cost for the Intervention (Rs.)	9100		
Parameters to be studied	Weight gain & BCR		
Team members	SMS (Animal Science), SMS (Agrl extension) and Senior		

	Scientist and Head
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OFT No.	21							
Crop/ enterprise	Processing							
Prioritized problem	Banana is cultivated in over 2400 ha. Due to the COVID 19 situation the price of banana has got reduced also frequent strong wind leads to wastage of bunches. There is also prevalence of nutritional deficiency among children and women. Cabinet drying technique of dehydration is expensive and sun drying may lead to fungal contamination as well as poor quality flour.							
Title of intervention	<b>Assessment of solar drying technique for banana flour preparation in Poovan variety</b>							
Technology options								
TO-1	Blanching + curing + Solar drying and preparation of value added product – Health beverage mix Peeling of skin of unripe banana followed by dipping in hot water for 3 – 5 minutes. Then the blanched fruits are cut into small pieces followed by immersing in 2% salt solution for 20 minutes for curing. This is followed by Solar drying for 1 to 2 days till a moisture level of 13% is achieved.							
TO-2	Blanching + curing + Cabinet drying and preparation of value added product – Health beverage mix Peeling of skin of unripe banana followed by dipping in hot water for 3 – 5 minutes. Then the blanched fruits are cut into small pieces followed by immersing in 2% salt solution for 20 minutes for curing. Drying in cabinet at 60° C for 12 hr.							
FP	Blanching + curing + Sun drying and preparation of value added product – Health beverage mix Peeling of skin of unripe banana followed by dipping in hot water for 3 – 5 minutes. Then the blanched fruits are cut into small pieces followed by immersing in 2% salt solution for 20 minutes for curing. Drying in sun for 3 – 4 days.							
Source of Technology								
TO-1	TNAU (2018)							
TO-2	TNAU (2015)							
Status	New proposal							
Name of critical input	<b>Banana</b>	<b>sugar</b>	<b>citric acid</b>	<b>millet</b>	<b>pulses</b>	<b>trays</b>	<b>packaging &amp; labeling</b>	<b>Field Board</b>
Qty per trial	10 Kg	10 Kg	250 gm	20 kg	10 Kg	3	-	1 no
Cost per trial (Rs.)	500	500	50	1250	1284	3500	1000	250
No. of trials	3							
Total cost for the Intervention (Rs.)	24500							
Parameters to be studied	Dehydration yield, Organoleptic characters, Keeping quality (days), BC ratio							
Team members	SMS (Home Science), SMS (Horti) and Senior Scientist and Head							

OFT No.	22
Crop/ enterprise	Post harvest technology
Prioritized problem	The available candies in the market are prepared from refined white sugar, that is not very healthy. Water melon is abundantly available during the season and the rind is not utilized. There is unemployment among farm women during summer season
Title of intervention	<b>Assessment of alternative sweetener for watermelon rind candy preparation</b>
Technology options	
TO-1	Watermelon rind candy with jaggery The water melon rind is cut in to small pieces (1 – 1.5 cm cubes) and these pieces are exposed to steam (blanching) at about 85°C to 95°C for 3 to 4 minutes. Jaggery syrup is prepared by addition of 765g jaggery in 500 ml water followed by addition of citric acid (2%) and KMS as per requirement. The cut pieces are soaked in the syrup for 24 hr. Next day the syrup is separated from the soaked cut pieces and boiled till a brix level of 60 is reached. Again the separated cut pieces are immersed in the boiled syrup. The procedure is repeated again after 24 hr but at a higher brix level of 70, which can be attained by adding jaggery. Again the procedure is repeated for another 5 days at the brix level of 70. Finally the soaked cut pieces are separated from the syrup, dried under sun till a moisture level of 20 – 25% is reached to get water melon candy. Packed the water melon preserve in glass jar.
TO-2	Watermelon rind candy with country sugar The water melon rind is cut in to small pieces (1 – 1.5 cm cubes) and these pieces are exposed to steam (blanching) at about 85°C to 95°C for 3 to 4 minutes. Country sugar syrup is prepared by addition of 765g Country sugar in 500 ml water followed by addition of citric acid (2%) and KMS as per requirement. The cut pieces are soaked in the syrup for 24 hr. Next day the syrup is separated from the soaked cut pieces and boiled till a brix level of 60 is reached. Again the separated cut pieces are immersed in the boiled syrup. The procedure is repeated again after 24 hr but at a higher brix level of 70, which can be attained by adding Country sugar. Again the procedure is repeated for another 5 days at the brix level of 70. Finally the soaked cut pieces are separated from the syrup, dried under sun till a moisture level of 20 – 25% is reached to get water melon candy. Packed the water melon rind candy in glass jar.
FP	Watermelon rind candy with refined white sugar The water melon rind is cut in to small pieces (1 – 1.5 cm cubes) and these pieces are exposed to steam (blanching) at about 85°C to 95°C for 3 to 4 minutes. White sugar syrup is prepared by addition of 765g white sugar in 500 ml water followed by addition of citric acid (2%) and KMS as per requirement. The cut pieces are soaked in the syrup for 24 hr. Next day the syrup is separated from the soaked cut pieces and boiled till a brix level of 60 is reached. Again the separated cut pieces are immersed in the boiled syrup. The procedure is repeated again after 24 hr but at a higher brix level of 70, which can be attained by adding white sugar. Again the procedure is repeated for another 5

	days at the brix level of 70. Finally the soaked cut pieces are separated from the syrup, dried under sun till a moisture level of 20 – 25% is reached to get water melon candy. Packed the water melon rind candy in glass jar.						
Source of Technology							
TO-1	TNAU (2013)						
TO-2	TNAU (2010)						
Status	New proposal						
Name of critical input	<b>Water melon</b>	<b>jaggery</b>	<b>white sugar</b>	<b>country sugar</b>	<b>citric acid</b>	<b>Packaging materials &amp; labeling</b>	<b>Field Board</b>
Qty per trial	10Kg	3Kg	3Kg	3Kg	250gm	-	1 no
Cost per trial (Rs.)	140	210	150	210	50	500	250
No. of trials	3						
Total cost for the Intervention (Rs.)	4025						
Parameters to be studied	BC ratio, Keeping quality, Organoleptic evaluation						
Team members	SMS (Home Science), SMS (Horti) and Senior Scientist and Head						

OFT No.	23
Crop/ enterprise	Value addition
Prioritized problem	Lack of awareness about therapeutics properties of herbs. Addition of artificial flavours and colouring agents leads to health hazards
Title of intervention	<b>Assessment of different types of herbal powder incorporated millet cookies</b>
Technology options	
TO-1	Millet cookies with addition of thulasi powder @ 20g/kg ( 2%)+ Whole wheat flour+ Millets (Ragi , Jowar) Roast millet flour on a low flame until a nice aroma of roasted millet is obtained. Allow it to cool. Mix millet flour, thulasipowder,wheat flour and baking powder and sieve it. Margarine is then added to the sieved flour. Rub-in until the mixture is crumbled. Add powdered sugar and mix well. Add little milk at a time and make smooth dough. Refrigerate the dough for 15-20 min. Dust wheat flour and roll the dough. Use biscuit cutters and cut into desired shapes. Place on a greased tray and bake at 180°C for 15-20 minutes. Remove and cool the biscuits.
TO-2	Millet cookies with addition of Thuthuvalai powder @ 20g/kg ( 2%)+ Whole wheat flour+ Millets (Ragi ,Bajra) Roast millet flour on a low flame until a nice aroma of roasted millet is obtained. Allow it to cool. Mix millet flour, thoothuvalaipowder,wheat flour and baking powder and sieve it. Margarine is then added to the sieved flour. Rub-in until the

	mixture is crumbled. Add powdered sugar and mix well. Add little milk at a time and make smooth dough. Refrigerate the dough for 15-20 min. Dust wheat flour and roll the dough. Use biscuit cutters and cut into desired shapes. Place on a greased tray and bake at 180°C for 15-20 minutes. Remove and cool the biscuits.				
FP	Maida + Dalta + White sugar+ Artificial colour Mix maida, baking powder and sieve it. Margarine is then added to the sieved flour. Rub-in until the mixture is crumbled. Add powdered sugar and mix well. Add little milk at a time and make smooth dough. Refrigerate the dough for 15-20 min. Dust wheat flour and roll the dough. Use biscuit cutters and cut into desired shapes. Place on a greased tray and bake at 180°C for 15-20 minutes. Remove and cool the biscuits.				
Source of Technology					
TO-1	UAS Dharward , 2015				
TO-2	TNAU 2015				
Status	New proposal				
Name of critical input	<b>Millets</b>	<b>sugar and Vanaspathi</b>	<b>herbs and other items</b>	<b>Packing materials</b>	<b>Field Board</b>
Qty per trial	2Kg	5Kg	500gm	-	1 no
Cost per trial (Rs.)	500	500	585	500	250
No. of trials	3				
Total cost for the Intervention (Rs.)	6500				
Parameters to be studied	BC ratio, Keeping quality, Organoleptic evaluation				
Team members	SMS (Home Science) and Senior Scientist and Head				

OFT No.	24				
Crop/ enterprise	Mushroom cultivation				
Prioritized problem	Farm women lack entrepreneurship opportunity . Paddy is cultivated in large area and hence paddy straw is available abundantly. The children and farm women have nutritional deficiency also.				
Title of intervention	<b>Assessment of different types of Oyster mushroom suitable for Karur District</b>				
Technology options					
TO-1	Arka (om) 1				
TO-2	APK 1				
FP	PF				
Source of Technology					
TO-1	IIHR 2011				
TO-2	TNAU 2016				
Status	New proposal				
Name of critical input	<b>Arka (om) 1</b>	<b>APK 1 &amp; PF oyster mushroom Spawn</b>	<b>polythene bags</b>	<b>Field Board</b>	
Qty per trial	Each 10 pockets of spawn	Each 10 pockets of spawn	-	1 no	

Cost per trial (Rs.)	1000	1000	250	250
No. of trials	3			
Total cost for the Intervention (Rs.)	7500			
Parameters to be studied	Yield(Kg), Shelf life, BC ratio			
Team members	SMS (Home Science), Farm Manager and Senior Scientist and Head			

## 8. Frontline Demonstrations proposed during 2020-21

### 8.1. Summary of FLDs

FLD No.	Source of technology	Status*	Total cost for the Demo (Rs.)	Team members
1	TNAU – 2019	New proposal	5300	SMS (Agronomy), SMS (Agrl.Extension), SM S (Home Science) and Senior Scientist and Head
2	CRIDA - 2014	approved FLD3 <sup>rd</sup> Year	9400	SMS (Agronomy), SMS (Agrl.Extension) and Senior Scientist and Head
3	TNAU - 2019	New proposal	11050	SMS (Agronomy), SMS (Soil Science), SMS (Agrl.Extension) and Senior Scientist and Head.
4	TNAU – 2019	New proposal	10100	SMS (Agronomy), SMS (Agrl.Extension) and Senior Scientist and Head.
5	TNAU-2020	New proposal	13000	SMS-Hort,SS&H,PAT
6	TNAU 2020	New proposal	16000	SMS – Horti, SS&H, PAT
7	TNAU 2015	New proposal	16000	SMS – Horti, SS&H, PAT
8	TNAU-2020	New proposal	9900	SMS-Hort,SS&H,PAT
9	TNAU - 2019	New proposal	10750	SMS-Hort,SS&H,PAT
10	TNAU CPG 2020	New proposal	11950	SMS (Soil Science), SMS (Agronomy) and Senior Scientist and Head.
11	TNAU CPG 2020	New proposal	15700	SMS (Soil Science), SMS (Horticulture) and Senior Scientist and Head
12	TNAU CPG 2020	New proposal	5200	SMS (Soil Science), SMS (Agronomy) and Senior Scientist and Head.
13	TNAU CPG 2020	New proposal	5700	SMS (Soil Science), SMS (Agronomy) and

				Senior Scientist and Head.
14	TNAU – CPG- 2020	New proposal	8750	Farm Manager and Senior Scientist and Head
15	TNAU CPG 2020	New proposal	6250	Farm Manager and Senior Scientist and Head
16	TNAU CPG 2020	New proposal	7500	Farm Manager and Senior Scientist and Head
17	TNAU – 2018	New proposal	25000	Farm Manager and Senior Scientist and Head
18	TNAU	New proposal	1000	SMS( Agrl.Extension) & SMS (Agron)
19	GOI guidelines 2020	New proposal	10000	SMS (Agrl.Extension) &SMS(Home Science)
20	TANUVAS - TRPVB 2016	Approved FLD in 2 <sup>nd</sup>	5500	SMS (Animal science), SMS (Agrl.Extension) and Senior Scientist and Head
21	TANUVAS - TRPVB 2016	Approved FLD	4000	SMS (Animal science), SMS (Agrl. Home Science) and Senior Scientist and Head
22	TANUVAS – 2010	Approved FLD 2 <sup>nd</sup> year	21200	SMS (Animal science), SMS (Agrl. Home Science) and Senior Scientist and Head
23	ICAR NIANP – 2010	New proposal	5000	SMS (Animal science), SMS (Agrl.Extension) and Senior Scientist and Head
24	TNAU 2014	New proposal	13025	SMS (Home Science), SMS (Horti) and Senior Scientist and Head
25	Min. of Ayush , 2020	New proposal	15000	SMS (Home Science), SMS (Horti) and Senior Scientist and Head
26	TNAU 2014	New proposal	9000	SMS (Home Science), SMS (Horti) and Senior Scientist and Head

## 8.2. Details of FLDs

FLD No.:	1
Category:	Cereals
Crop:	Paddy



Prioritized problem:	Low yield due to use of old variety and poor germination percentage. As VGD 1 has a fine grain and gives higher yield the profitability is high.					
Technology to be demonstrated:	Demonstration of fine grain paddy variety VGD 1, seed treatment and soil application of bio fertilizers and bio control agents.					
Variety:	Variety					
Name of the Variety:	Paddy - VGD 1 - Parentage - ADT43 / Seeraga samba. Duration - 129 days; 5 days earlier than Seeraga samba, Suitable for samba/ late samba seasons, Semi-dwarf, erect, high tillering, non lodging plant habit with grain type similar to land race Seeraga samba, Average grain yield - 5859 kg/ha with 32.56 and 13.80 per cent increase over Seeraga samba and TKM 13 respectively. Moderately resistant to leaf folder, blast and brown spot, Fine white rice (SB) with 1000 grain weight of only 8.9 grams. It is suitable for making briyani and khuska. High milling (66 %) and head rice recovery (62.1 %), in comparison to the check variety Seeraga samba. High linear elongation ratio (2.1) Cooking quality and organoleptic characters are comparable to that of check variety Seeraga samba. Cooked rice is non-sticky and soft. Presence of aromatic compound 1,6,10,14-Hexadecatetraen-3-ol (synonym is Geranyl linalool) is identified in rice grain through GC-MS analysis (IIFPT, Thanjavur).					
Source of Technology:	TNAU - 2019					
Status	New proposal					
Name of critical input:	<b>Paddy seed VDG 1</b>	<b>Azospirillum</b>	<b>Phosphobacteria</b>	<i>Pseudomonas fluorescens</i>	<i>Trichoderma viride</i>	<b>Field board</b>
Qty per Demo:	15 kg	1 kg	1 kg	1 kg	1 kg	1 no
Cost per Demo (Rs.):	450	60	60	120	120	250
No. of Demos:	5					
Total cost for the Demo (Rs.):	5300					
Parameters to be studied:	Plant growth parameters, Yield and Economics, BCR and Cooking quality					
Team members	SMS (Agronomy), SMS (Agrl.Extension), SM S (Home Science) and Senior Scientist and Head					

FLD No.:	2
Category:	Pulses
Crop:	Horsegram
Prioritized problem:	Low yield due to farmers growing locally available seeds for longer period. Poor ICM practices
Technology to be	Drought tolerant Horsegram variety CRIDA Horse gram – CRGH -19 with ICM Practices followed TNAU Pulse wonder two spray.

demonstrate d:							
Hybrid or Variety:	Variety						
Name of the Hybrid or Variety:	CRGH -19 - This is a dual purpose horse gram variety maturing in 85-90 days. Tolerating drought, CRHG 19 Horse gram can yield on 760-1300 kg/ha of dark brown grains and 2800-2500 kg/ha of dry fodder yield. This is tolerant to YMV, Anthracnose, Powdery mildew, mite protection from 29%. It is dark brown seed and non shattering.						
Source of Technology	CRIDA - 2014						
Status	approved FLD3 <sup>rd</sup> Year						
Name of critical input:	<b>Horsegram CRGH 19</b>	<b>Rhizobium</b>	<b>Phosphobacteria</b>	<i>Pseudomonas fluorescens</i>	<i>Trichoderma viride</i>	TNAU Pulse wonderr	<b>Field board</b>
Qty per Demo:	8 kg	1 kg	1 kg	1kg	1 kg	2.5 kg	1 no
Cost per Demo (Rs.):	720	60	60	120	120	550	250
No. of Demos:	5						
Total cost (Rs.):	9400						
Parameters to be studied:	Plant growth parameters, Yield and Economics and BCR.						
Team members	SMS (Agronomy), SMS (Agrl.Extension) and Senior Scientist and Head						

FLD No.:	3						
Category:	Pulses						
Crop:	Redgram – Drought management						
Prioritized problem:	Low yield due to farmers growing locally available seeds for longer period. Poor flowering and pods setting due to moisture stress at respective stages.						
Technology to be demonstrated:	Demonstration of high yielding variety CO 9, Transplanted techniques with Chisel ploughing and use of Pusa hydrogel.						
Variety:	Variety						
Name of the Hybrid or Variety:	Redgram – CO 9 - Chisel ploughing to be done after summer ploughing at 5 feet spacing. Pusal hydrogel at 1 kg/ha to be broadcasted with sand before last ploughing. Redgram seedlings raised in polybags after seed treatment with biofertilizers&biopesticides, transplanted at 90 x 60 cm spacing. Other ICM practices for rainfed redgram are followed.						
Source:	TNAU - 2019						
Status	New proposal						
Name of critical	<b>Redgram</b>	<b>Pusahydrogel</b>	<b>Rhizobium</b>	<b>Phosphobacteria</b>	<i>Pseudomonas</i>	<i>Trichoderma viride</i>	<b>Field</b>

input:	<b>CO 9 seed</b>				<i>fluorescens</i>		<b>board</b>
Qty per Demo:	8 kg	250 g	1 kg	1 kg	1kg	1 kg	1 no
Cost per Demo (Rs.):	800	800	60	60	120	120	250
No. of Demos:	5						
Total cost	11050						
Parameters to be studied:	Plant growth parameters, Yield and Economics						
Team members	SMS (Agronomy), SMS (Soil Science), SMS (Agrl.Extension) and Senior Scientist and Head.						

FLD No.:	4						
Category:	Minor millets						
Crop	Kodo millet						
Prioritized problem:	Low yield due to farmers growing locally available seeds for longer period. Farmers lacking awareness of high yield and drought tolerant variety.						
Technology to be demonstrated:	Demonstration of Improved crop management in Kodo millet (Varagu) TNAU 86 with ICM practices TNAU 86 - Crop duration 105 – 110 days, yield : 2700 – 3200 kg/ha, Long panicles, Non lodging, Tolerant to head smut, sheath blight and brown spot						
Variety:	Variety						
Name of the Variety:	Kodo millet (Varagu)						
Source of Technology:	TNAU - 2019						
Status	New proposal						
Name of critical input:	<b>Kodo millet (Varagu) TNAU 86</b>	<b>Azospirillum</b>	<b>Phosphobacteria</b>	<b>Pseudomonas fluorescens</b>	<b>Trichoderma viride</b>	<b>Millets MN mixture</b>	<b>Field board</b>
Qty per Demo:	4 kg	1 kg	1 kg	1 kg	1 kg	2 kg	1 no
Cost per Demo (Rs.):	200	60	60	120	120	200	250
No. of Demos:	10						
Total cost	10100						
Parameter	Plant growth parameters, Yield and Economics						

s to be studied:	
Team members	SMS (Agronomy), SMS (Agrl.Extension) and Senior Scientist and Head.

FLD No.:	5			
Category:	Fruits			
Crop/ enterprise:	Mango			
Prioritized problem:	Low yield due to less flowers induction and fruit setting			
Technology to be demonstrated:	<p>Demonstration of flower induction and fruit setting in Mango.</p> <ul style="list-style-type: none"> <li>✓ Demonstration of flower induction and fruit setting in Mango.</li> <li>✓ Spraying NAA @ 20 ppm at flowering to increase the fruit set and retention .</li> <li>✓ During February 0.5% Urea (5 g / lit.) or 1% Potassium nitrate (10 g / lit.) may be sprayed to induce flowering.</li> <li>✓ Spraying 2% KNO<sub>3</sub> at mustard size to increase fruit size and retention of fruits. Spray 2 % sulphate of potash at pea stage and 15 days after to improve yield and quality.</li> </ul> <p>During off year Paclobutrazol @ 0.75 g per metre of canopy radius in full bearing tree during first fortnight of September to get maximum number of fruits and yield.</p>			
Hybrid or Variety:	Variety			
Name of the Hybrid or Variety:	Imampasand			
Source of Technology:	TNAU-2020			
Status	New proposal			
Name of critical input:	<b>Naphthaleneacetic acid (NAA)</b>	<b>Potassium Nitrate</b>	<b>Paclobutrazol</b>	<b>Field Board</b>
Qty per Demo:	200ml	5Kg	250 ml	1
Cost per Demo (Rs.):	400	650	1300	250
No. of Demos:	5			
Total cost for the Demo (Rs.):	13000			
Parameters to be studied:	Fruit weight, Yield/ tree, Yield/Ha, BCR			
Team members	SMS-Hort,SS&H,PAT			

FLD No.:	6			
Category:	Hort crops			
Crop/ enterprise:	Tapioca			
Prioritized problem:	Low productivity due to deficiency of micro nutrients in soil, non adoption of ICM practices			
Technology to be demonstrated:	<p>Integrated Nutrient Management in Tapioca</p> <p>Cassava Tonic is the mixture of fermented organic manures and inorganic nutrients along with biocontrol agent. 100 kg cowdung mixed in 200 lit water and filtered. Add 2.5kg of <i>Pseudomonas fluorescence</i> and 2.5 kg neem cake and kept for fermentation. In the fermented solution, adde 0.5 % sulphate of potash, 0.9 %</p>			

	multi K (KNO <sub>3</sub> ), 0.5 % MgSO <sub>4</sub> , 0.25 % ZnSO <sub>4</sub> and 0.5 % FeSO <sub>4</sub> and mixed well and made up to 500 lit with water and sprayed four times from one month after planting at 21 days interval.				
Hybrid or Variety:	Variety				
Name of the Hybrid or Variety:	YTP-2				
Source of Technology:	TNAU 2020				
Status	New proposal				
Name of critical input:	<b>Setts</b>	<b>Azospirillum</b>	<b>Phophobacteria</b>	<b><i>T.viride</i></b>	<b>Field board</b>
Qty per Demo:	2470	2kg	2 kg	2kg	1 no
Cost per Demo (Rs.):	2470	120	120	240	250
No. of Demos:	10				
Total cost for the Demo (Rs.):	16000				
Parameters to be studied:	Crop establishment % ,Pests and diseases incidence,Cropduration,Yield /plant, Yield/ha, BCR, Starch content				
Team members	SMS – Horti, SS&H, PAT				

FLD No.:	7				
Category:	Hort crops				
Crop/ enterprise:	Cluster bean				
Prioritized problem:	-				
Technology to be demonstrated:	Demonstration of Cluster bean Variety MDU-1. MDU 1 is the first release in cluster bean from Agricultural College & Research Institute (AC&RI), Madurai. It has a cluster bearing nature (7-9 fruits/node) with long attractive green colored fruits measuring 13-14 cm. Plant matures in 90-100 days and has more number of fruits / plant (150-175 fruits) with an attainable yield of 250-300 g/plant. Fruits are rich in fiber content (4.5g/100g of the fruit) and the plants can tolerate powdery mildew.				
Hybrid or Variety:	Variety				
Name of the Hybrid or Variety:	Cluster bean Variety MDU-1				
Source of Technology:	TNAU 2013				
Status	New proposal				
Name of critical input:	<b>Seeds</b>	<b>Azospirillum</b>	<b>Phophobacteria</b>	<b><i>T.viride</i></b>	<b>Field board</b>
Qty per Demo:	3kg	2kg	2 kg	2kg	1 no
Cost per Demo (Rs.):		120	120	240	250
No. of Demos:	10				
Total cost for the Demo (Rs.):	16000				
Parameters to be studied:	Crop establishment % ,Pests and diseases incidence,Cropduration,Yield /plant, Yield/ha, BCR, Starch content				
Team members	SMS – Horti, SS&H, PAT				

FLD No.:	8				
Category:	Medicinal Plant				
Crop/ enterprise:	SolanumNigrum				

Prioritized problem:	Imbalanced nutrients in human diets				
Technology to be demonstrated:	Demonstration of SolanumNigrum CO 1. Propagation is by seeds. The seedlings are first raised in the nursery and transplanted to the main field 30-45 days after sowing when the plants attain 8-10 cm height. During rainy season, planting is done on ridges while during summer in furrows, at a spacing ranging from 30-90 cm depending upon the stature and spreading habit of the plant. The transplanted seedlings should be given temporary shade for 2-4 days during summer.The crop is usually ready for harvesting after 4-6 months depending upon the climate and soil. The plants are collected and dried in shades.				
Hybrid or Variety:	Variety				
Name of the Hybrid or Variety:	CO1				
Source of Technology:	TNAU-2020				
Status	New proposal				
Name of critical input:	<b>Seeds</b>	<b>Azospirillum</b>	<b>Phosphobacteria</b>	<b><i>P. Fluorescens</i></b>	Field Board
Qty per Demo:	1Kg	1Kg	1Kg	1Kg	1
Cost per Demo (Rs.):	500	60	60	120	250
No. of Demos:	10				
Total cost for the Demo (Rs.):	9900				
Parameters to be studied:	Frequency of harvesting, herbage yield, BCR				
Team members	SMS-Hort,SS&H,PAT				

FLD No.:	9				
Category:	Millets				
Crop/ enterprise:	Ragi				
Prioritized problem:	Low yield due problem soil ( pH – 8.52 & EC – 2.60 dS/m ) ,High salt content in irrigation water ( pH 8.15 – 8.87, EC 2.31 – 3.12 dS/m)				
Technology to be demonstrated:	<p>Demonstration of Ragi (CO 15) in Sodic soil</p> <ul style="list-style-type: none"> <li>▪ Spread 12.5 t/ha of FYM and green manuring 5 MT/ha</li> <li>▪ Apply basally 60 kg N, 30 kg P<sub>2</sub>O<sub>5</sub> and 30 kg K<sub>2</sub>O per ha.</li> <li>▪ Soil application of biofertilizers – Azospirillum &amp; Phosphobacteria @ 2 kg/ha</li> </ul> <p>For alleviating Zn deficiency in plants, spray 0.5% ZnSO<sub>4</sub> on 30, 40 and 50days after sowing</p>				
Hybrid or Variety:	Variety				
Name of the Hybrid or Variety:	CO 15				
Source of Technology:	TNAU CPG 2020				
Status	New proposal				
Name of critical input:	<b>Seeds</b>	<b>Bio fertilizers</b>	<b>Zinc sulphate</b>	<b>Field board</b>	
Qty per Demo:	5 kg	2 kg	20 kg	1 no	

Cost per Demo (Rs.):	425	120	400	250
No. of Demos:	10			
Total cost for the Demo (Rs.):	11950			
Parameters to be studied:	Soil test , Plant growth parameters, Yield and Economics, BCR			
Team members	SMS (Soil Science), SMS (Agronomy) and Senior Scientist and Head.			

FLD No.:	10		
Category:	Bulb vegetable		
Crop/ enterprise:	Onion		
Prioritized problem:	Low production of bulbs due to Imbalanced nutrient application , high cost of cultivation and deficiency of micronutrient		
Technology to be demonstrated:	<p>Demonstration of INM in onion (CO 5)</p> <ul style="list-style-type: none"> <li>▪ Apply FYM 25 t/ha, Azospirillum 2 kg and Phosphobacteria 2 kg/ha, N 30 kg, P 60 kg and K 30 kg/ha as basal and 30 kg N/ha on 30th day of sowing</li> </ul> <p>Foliar spraying of 0.5 % IHR Vegetable Special at 45, 60 &amp; 75 DAP (IHR - 2013)</p>		
Hybrid or Variety:	Variety		
Name of the Hybrid or Variety:	CO 5		
Source of Technology:	TNAU CPG 2020		
Status (New proposal/approved FLD : 2 <sup>nd</sup> / 3 <sup>rd</sup> Year)	New proposal		
Name of critical input:	<b>Bio fertilizers</b>	<b>Vegetable booster</b>	<b>Field board</b>
Qty per Demo:	2kg	6 kg	1 no
Cost per Demo (Rs.):	120	1200	250
No. of Demos:	10		
Total cost for the Demo (Rs.):	15700		
Parameters to be studied:	Plant growth parameters, soil test , Yield and Economics		
Team members	SMS (Soil Science), SMS (Horticulture) and Senior Scientist and Head		

FLD No.:	11		
Category:	Fodder		
Crop/ enterprise:	Sorghum		
Prioritized problem:	Nutrient deficiencies leads to poor quality seed and fodder yield		
Technology to be demonstrated:	<p>Demonstration of INM in Multicut fodder sorghum(CoFS 29) for seed production</p> <ul style="list-style-type: none"> <li>▪ Apply FYM 25 t/ha, Azospirillum 2 kg and Phosphobacteria 2 kg/ha</li> </ul> <p>Apply 45 : 40 : 40 kg N,P, K/ha as basal and 45 kg N as top dressing on 30 DAS</p>		
Hybrid or Variety:	Variety		

Name of the Hybrid or Variety:	CoFS 29		
Source of Technology:	TNAU CPG 2020		
Status (New proposal/approved FLD : 2 <sup>nd</sup> / 3 <sup>rd</sup> Year)	New proposal		
Name of critical input:	<b>Bio fertilizers</b>	<b>Soil test</b>	<b>Field board</b>
Qty per Demo:	2 kg	1 No	1 no
Cost per Demo (Rs.):	120	150	250
No. of Demos:	10		
Total cost for the Demo (Rs.):	5200		
Parameters to be studied:	Soil test, Plant growth parameters, Yield and Economics		
Team members	SMS (Soil Science), SMS (Agronomy) and Senior Scientist and Head.		

FLD No.:	12		
Category:	Oilseeds		
Crop/ enterprise:	Groundnut		
Prioritized problem:	Poor quality irrigation water leads to deterioration of soil health Low yield ( pH : 7.89 – 9.12 , EC : 1.90 – 3.14 dS/m)		
Technology to be demonstrated:	<p>Demonstration on poor quality irrigation water Management techniques in Groundnut</p> <ul style="list-style-type: none"> <li>▪ Apply FYM 25 MT/ha followed by incorporation of green manure 5 MT/ha</li> <li>▪ Azospirillum 2 kg and Phosphobacteria 2 kg/ha</li> </ul> <p>Application of 80 kg of gypsum and 20 kg of pebbles during irrigation</p>		
Hybrid or Variety:	Variety		
Name of the Hybrid or Variety:			
Source of Technology:	TNAU CPG 2020		
Status (New proposal/approved FLD : 2 <sup>nd</sup> / 3 <sup>rd</sup> Year)	New proposal		
Name of critical input:	<b>Bio fertilizers</b>	<b>Soil and irrigation water analysis</b>	<b>Field board</b>
Qty per Demo:	2 kg	1 No	1 no
Cost per Demo (Rs.):	120	200	250
No. of Demos:	10		
Total cost for the Demo (Rs.):	5700		
Parameters to be studied:	Soil and water test, Plant growth parameters, Yield and Economics		
Team members	SMS (Soil Science), SMS (Agronomy) and Senior Scientist and Head.		

FLD No.:	13
Category:	Cereals



Crop/ enterprise:	Paddy	
Prioritized problem:	Indiscriminate use of fungicide leads to increase production cost.	
Technology to be demonstrated:	Treat the seeds with <i>Pseudomonas fluorescens</i> TNAU liquid formulation @ 10 ml/kg of seeds, Seedling root dipping with <i>P. fluorescens</i> TNAU liquid formulation @ 500 ml for one hectare seedlings, Soil application with <i>P. fluorescens</i> liquid formulation @ 500 ml/ha; Foliar spray with <i>P. fluorescens</i> TNAU liquid formulation @ 5 ml/l, Need based application of azoxystrobin + difenoconazole.	
Hybrid or Variety:	Variety	
Name of the Hybrid or Variety:	Paddy – TKM 13	
Source of Technology:	TNAU – CPG- 2020	
Status	New proposal	
Name of critical input:	<i>Pseudomonas fluorescens</i>	Field board
Qty per Demo:	3lit	1 no
Cost per Demo (Rs.):	1500	250
No. of Demos:	5	
Total cost for the Demo (Rs.):	8750	
Parameters to be studied:	Percent disease incidence, Yield, BCR	
Team members	Farm Manager and Senior Scientist and Head	

FLD No.:	14
Category:	Cash crops
Crop/ enterprise:	Cotton
Prioritized problem:	Low yield due to high incidence of pink boll worm
Technology to be demonstrated:	Hand pick and burn periodically egg masses, visible larvae, affected and dropped squares, flowers and fruits and squash pink bollworm in the rosettes. Use pheromone traps to monitor the adult moth activity @ 12 / ha. Inundative release of egg parasitoid <i>Trichogramma toideabactrae</i> @ 40,000 / ha at 15 days interval 3 times from 45 days after sowing with coinciding the incidence of the pest. Spraying Emamectin Benzoate 5% SG 190 – 220 g/ha or Thiodicarb 75% WP 1000 g /ha
Hybrid or Variety:	Variety
Name of the Hybrid or Variety:	

Source of Technology:	TNAU CPG 2020		
Status	New proposal		
Name of critical input:	<b>Pheromone traps</b>	<i>Trichogramma toideabactrae</i>	<b>Field board</b>
Qty per Demo:	12 / ha	40,000 / ha	1 no
Cost per Demo (Rs.):	400	600	250
No. of Demos:	5		
Total cost for the Demo (Rs.):	6250		
Parameters to be studied:	Percent damage, Yield, BCR		
Team members	Farm Manager and Senior Scientist and Head		

FLD No.:	15			
Category:	Horticultural crops			
Crop/ enterprise:	Guava			
Prioritized problem:	Low yield due to high incidence of nematodes			
Technology to be demonstrated:	Use of air layers and sterilized soil media or adopting soil less media (vermiculite and coir pith) can keep the nematodes from entering the root system at nursery stage. Intercropping with marigold around the basin of the tree. Application of carbofuran 3 G @ 33 kg/ ha or phorate 10 G @ 10 kg per ha at the time of planting. Application of nematode egg parasitic fungus, <i>Purpureocilliumlilacinum</i> (= <i>Paecilomyceslilacinus</i> ) @ 60 g mixed with FYM 5 kg and neem cake @ 250 g per tree, thrice, once in three months.			
Hybrid or Variety:	Variety			
Name of the Hybrid or Variety:				
Source of Technology:	TNAU CPG 2020			
Status (New proposal/approved FLD : 2 <sup>nd</sup> / 3 <sup>rd</sup> Year)	New proposal			
Name of critical input:	<b>Marigold seeds</b>	<i>Purpureocilliumlilacinum</i>	<b>Neem cake</b>	<b>Field board</b>
Qty per Demo:	100g	2kg	10kg	1 no
Cost per Demo (Rs.):	250	650	350	250
No. of Demos:	5			
Total cost for the Demo (Rs.):	7500			
Parameters to be studied:	Percent damage, Yield, BCR			
Team members	Farm Manager and Senior Scientist and Head			

FLD No.:	16			
Category:	Horticultural Crops			
Crop/ enterprise:	Moringa			
Prioritized problem:	Low yield due to pollination			
Technology to be	Keeping two honey bee boxes/acre			

demonstrated:		
Hybrid or Variety:	Variety	
Name of the Hybrid or Variety:		
Source of Technology:	TNAU - 2018	
Status (New proposal/approved FLD : 2 <sup>nd</sup> / 3 <sup>rd</sup> Year)	New proposal	
Name of critical input:	<b>Honey bee box</b>	<b>Field board</b>
Qty per Demo:	2/acre	1 no
Cost per Demo (Rs.):	4800	250
No. of Demos:	5	
Total cost for the Demo (Rs.):	25250	
Parameters to be studied:	Yield, BCR	
Team members	Farm Manager and Senior Scientist and Head	

FLD No.:	17
Category:	Cereal crops
Crop/ enterprise:	Paddy
Prioritized problem:	Due to the COVID 19 lockdown, there is problem for reaching out to farmers. Under such situations use of TNAU Agritech portal in Mobile itself will be useful to farmers for getting information quickly.
Technology to be demonstrated:	<b>Demonstration of mobile based TNAU Agritech portal</b>
Hybrid or Variety:	-
Name of the Hybrid or Variety:	-
Source of Technology:	TNAU
Status	New proposal
Name of critical input:	User information leaflet
Qty per Demo:	
Cost per Demo (Rs.):	500
No. of Demos:	5 (5 farmers per location)
Total cost for the Demo (Rs.):	2500
Parameters to be studied:	Pre and post evaluation of knowledge level, adoption level through questionnaire method.
Team members	SMS( Agri.Extension) & SMS (Agron)

FLD No.:	18
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Category:	Vegetables				
Crop/ enterprise:	Brinjal				
Prioritized problem:	Farmers are engaged in vegetables cultivation and they are frequently visiting markets, and are prone for more exposure to COVID 19.				
Technology to be demonstrated:	<b>Demonstration on COVID 19 prevention techniques for vegetable growers</b>				
Hybrid or Variety:	-				
Name of the Hybrid or Variety:	-				
Source of Technology:	GOI guidelines 2020				
Status	New proposal				
Name of critical input:	<b>Mask</b>	<b>Gloves</b>	<b>Sanitizer</b>	<b>Thermal scanner</b>	<b>Field board</b>
Qty per Demo:	25	25	25	2	3
Cost per Demo (Rs.):	10	90	50	5000	250
No. of Demos:	5 (5 farmers per location)				
Total cost for the Demo (Rs.):	20000				
Parameters to be studied:	User information leaflet, Pre and post evaluation of awareness level & adoption level of preventive measures through questionnaire method.				
Team members	SMS (Agrl.Extension) & SMS(Home Science)				

FLD No.:	19			
Category:	Tree			
Crop/ enterprise:	Kadam			
Prioritized problem:	Low productivity of lands and unutilized space			
Technology to be demonstrated:	Demonstration on Bund Planting of MTP 1 Kadam trees in Garden Lands as Additional Income(DFI)			
Hybrid or Variety:				
Name of the Hybrid or Variety:	MTP 1			
Source of Technology:	<b>TNAU 2019</b>			
Status	New proposal			
Name of critical input:	<b>Kadam seedlings</b>	<b>VAM</b>	<b>Field Board</b>	
Qty per Demo:	15		1	
Cost per Demo (Rs.):	1600	300	250	
No. of Demos:	5			
Total cost for the Demo (Rs.):	<b>10750</b>			
Parameters to be studied:	<b>Height and Girth of seedlings Can be harvested at 36-60 Months old</b>			
Team members	SMS(Horti), SS&H, PAT			

FLD No.:	20		
Category:	Disease Management		
Crop/ enterprise:	Dairy Cow		
Prioritized problem:	High somatic cell count, incidence of subclinical mastitis, Poor shelf life of milk economic loss Each fibrosed quarter led to the declining		

	of value of animal.		
Technology to be demonstrated:	Mastiguard Spray		
Hybrid or Variety:	Cross breed		
Name of the Hybrid or Variety:	Cross breed		
Source of Technology:	TANUVAS - TRPVB 2016		
Status	Approved FLD in 2nd		
Name of critical input:	<b>Mastiguard Spray</b>	<b>TANUCHECK kit</b>	<b>Field Board</b>
Qty per Demo:	1 No	1 No	1 No
Cost per Demo (Rs.):	250	50	250
No. of Demos:	10		
Total cost for the Demo (Rs.):	5500		
Parameters to be studied:	% incidence of subclinical mastitis , SCC , B.C.Ratio		
Team members	SMS (Animal science), SMS (Agrl.Extension) and Senior Scientist and Head		

FLD No.:	21		
Category:	Disease Management		
Crop/ enterprise:	Dairy Cow		
Prioritized problem:	Lack of knowledge on ketosis and its diagnosis		
Technology to be demonstrated:	TANUVAS Ketocheck		
Hybrid or Variety:	Cross breed		
Name of the Hybrid or Variety:	Cross breed		
Source of Technology:	TANUVAS - TRPVB 2016		
Status	Approved FLD		
Name of critical input:	<b>TANUVAS ketoquant</b>	<b>Field Board</b>	
Qty per Demo:	1 No	1 No	
Cost per Demo (Rs.):	150	250	
No. of Demos:	10		
Total cost for the Demo (Rs.):	4000		
Parameters to be studied:	Incidence of Ketosis & BCR		
Team members	SMS (Animal science), SMS (Agrl. Home Science) and Senior Scientist and Head		

FLD No.:	22		
Category:	Evaluation of breed		
Crop/ enterprise:	Japanese Quail		
Prioritized problem:	Poor weight gain and egg laying capacity, Unavailability of improved strains		
Technology to be demonstrated:	Namkkal Gold quail		

Hybrid or Variety:	Variety		
Name of the Hybrid or Variety:	Namkkal Gold quail		
Source of Technology:	TANUVAS - 2010		
Status	Approved FLD 2 <sup>nd</sup> year		
Name of critical input:	<b>Namkkal Gold quail chick</b>	<b>Quail Feed</b>	<b>Field Board</b>
Qty per Demo:	150 nos	100 Kg	1 No
Cost per Demo (Rs.):	2250	2800	250
No. of Demos:	4		
Total cost for the Demo (Rs.):	21200		
Parameters to be studied:	Livability, Weight gain, Egg production & BCR		
Team members	SMS (Animal science), SMS (Agrl. Home Science) and Senior Scientist and Head		

FLD No.:	23		
Category:	Animal Nutrition		
Crop/ enterprise:	Dairy		
Prioritized problem:	Lack of fodder availability. Low digestibility of paddy straw		
Technology to be demonstrated:	SSF technology for bioconversion of paddy straw		
Hybrid or Variety:	-		
Name of the Hybrid or Variety:	-		
Source of Technology:	ICAR NIANP - 2010		
Status	New proposal		
Name of critical input:	<b>The white rot fungi <i>Pleurotusostreatus and Phanerochaetechrysosporiumculture</i></b>	<b>Field Board</b>	
Qty per Demo:	1 No	1 No	
Cost per Demo (Rs.):	500	250	
No. of Demos:	5		
Total cost for the Demo (Rs.):	3750		
Parameters to be studied:	Milk production and BCR		
Team members	SMS (Animal science), SMS (Agrl.Extension) and Senior Scientist and Head		

FLD No.:	24		
Category:	Nutrition garden		
Crop/ enterprise:	Vegetables		
Prioritized problem:	Low intake of vegetables due to high cost of vegetables Improper utilization of waste water Inorganic pesticide residues in fruits and vegetables purchased from market		
Technology to be demonstrated:	Community level vegetable cultivation following TNAU Kitchen garden model, to cater to the needs of the village in common land,		

	by sharing the resources and labour. Community kitchen garden is laid out in a common place where members of a village join to work for production of fresh vegetables. The layout is designed based on the nutritional requirement of the members. The area is protected with low cost shadenet fence. The following vegetable crops like brinjal, tomato, bhendi, onion, chillies, cluster bean, radish, bitter gourd, ridge gourd, ash gourd, snake gourd, pumpkin, drumstick, green leafy vegetables like amaranth, palak, coriander, fenugreek are grown in 30 cents. Organic inputs are used for nutrient and pest management.					
Hybrid or Variety:	-					
Name of the Hybrid or Variety:	-					
Source of Technology:	TNAU 2014					
Status (New proposal/approved FLD : 2 <sup>nd</sup> / 3 <sup>rd</sup> Year)	New proposal					
Name of critical input:	<b>Vegetable seeds and seedlings</b>	<b>Bio fertilizers</b>	<b>bio pesticides</b>	<b>vermi compost</b>	<b>fencing</b>	<b>Field Board</b>
Qty per Demo:	Each 250g	20lit	20lit	50Kg	1No	1 No
Cost per Demo (Rs.):	7500	1000	1000	500	2775	250
No. of Demos:	1					
Total cost for the Demo (Rs.):	13025					
Parameters to be studied:	Per capita consumption, Yield					
Team members	SMS (Home Science), SMS (Horti) and Senior Scientist and Head					

FLD No.:	25					
Category:	Nutrition					
Crop/ enterprise:	herbals					
Prioritized problem:	The farmers are resource poor. Farm women and children have nutritional deficiency					
Technology to be demonstrated:	To prepare immune boost foods and gave to peoples Herbal tea / decoction (Kadha) made from Tulsi (Basil), Dalchini (Cinnamon), Kalimirch (Black pepper), Shunthi (Dry Ginger) and Munakka (Raisin) - once or twice a day. Add jaggery (natural sugar) and / or fresh lemon juice to taste.					
Hybrid or Variety:	-					
Name of the Hybrid or Variety:	-					
Source of Technology:	Min. of Ayush , 2020					
Status	New proposal					
Name of critical input:	<b>Raw materials</b>	<b>weighing balance</b>	<b>sealing machine</b>	<b>packaging materials and</b>	<b>Field Board</b>	

				<b>labeling</b>	
Qty per Demo:	500gm	1no	1no	-	1 No
Cost per Demo (Rs.):	1000	5000	3000	1250	250
No. of Demos:	3				
Total cost for the Demo (Rs.):	15000				
Parameters to be studied:	Pre and post evaluation of health status by questionnaire method				
Team members	SMS (Home Science), SMS (Horti) and Senior Scientist and Head				

FLD No.:	26				
Category:	Value addition				
Crop/ enterprise:	Vegetables				
Prioritized problem:	Low price during season, lack of knowledge				
Technology to be demonstrated:	Dehydration techniques of tomato and preparation of tomato soup mix, puree and leather. Fully ripe and firm tomatoes were washed well in running tap water. Steam blanching for 3-4 mins ,then it is cut into small pieces and dried in the solar drier at 80°C for 10 hours. The dehydrated pieces are then ground into powder in a mixie.				
Hybrid or Variety:	-				
Name of the Hybrid or Variety:	-				
Source of Technology:	TNAU (2014)				
Status	New proposal				
Name of critical input:	<b>Raw materials</b>	<b>Sealing machine, weighing balance ,packaging and labeling</b>		<b>Field Board</b>	
Qty per Demo:	Each 25Kg	1No		1 No	
Cost per Demo (Rs.):	1250	5000		250	
No. of Demos:	3				
Total cost for the Demo (Rs.):	9000				
Parameters to be studied:	Keeping quality ,Organoleptic evaluation, BC ratio				
Team members	SMS (Home Science), SMS (Horti) and Senior Scientist and Head				



### 8.3. National Food Security Mission (NFSM)

#### 8.3.1. Cluster Frontline Demonstrations on Pulses

Category	Crop/enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo (Rs)	No. of Demo	Total cost for the Demo (Rs.)	Parameters to be studied	Team member
Pulses	Black gram	Low yield due to use of old traditional variety	Demonstration of high yielding Black gram variety VBN -8, Seed treatment and soil application of bio fertilizers and bio control agents, Spray TNAU Pulse wonder two times	Variety	VBN-8	TNAU 2016	Black gram seeds, Bio fertilizer, Bio control agents, TNAU Pulse wonder and plant protection agents.	Black gram seeds – 8 kg Rhizobium – 1 kg, Phosphobacteria – 1 kg, Pseudomonas fluorescence – 1 kg, TNAU Pulse wonder – 5 kg	3600	25	90000	Plants growth parameters, Yield, and BCR	SMS (Agrl. Extension), SMS (Agronomy)
Pulses	Green gram	Low yield	Demonstration of high	Variety	CO(G 8)	TNAU 2013	Greengram	Green gram seeds – 8 kg	3600	25	90000	Plants growth	SMS (Soil

		due to use of old traditional variety	yielding Green gram variety CO(Gg 8), Seed treatment and soil application of bio fertilizers and bio control agents, Spray TNAU Pulse wonder two times				seeds, Bio fertilizer s, Bio control agents, TNAU Pulse wonder and plant protection agents.	Rhizobium – 1 kg, Phosphobacteria – 1 kg, Pseudomonas fluorescence – 1 kg, TNAU Pulse wonder – 5 kg				parameters, Yield, and BCR	Science), SMS (Agronomy)
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### 8.3.2. Cluster Front Line Demonstrations on Oil Seeds

Category	Crop/enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo (Rs)	No. of Demo	Total cost for the Demo (Rs.)	Parameters to be studied	Team member
Oilseeds	Groundnut	Low yield due to use of	Demonstration of high yielding	Variety	TNAU CO 7 / VRI 8	TNAU	Groundnut seed, Bio	Groundnut seed – 50 kg Rhizobium – 1 kg,	4800	25	120000	Plants growth parameters, Yield,	SMS (Agronomy), SMS

		old traditional variety and poor ICM Practices	groundnut variety TNAU CO 7 / VRI 8, Seed treatment and soil application of bio fertilizers and bio control agents, Spray TNAU Groundnut rich two times				fertilizers, Bio control agents, TNAU Groundnut rich and plant protection agents.	Phosphobacteria – 1 kg, Pseudomonas fluorescence – 1 kg, TNAU Groundnut rich – 2.5 kg				Economics and BCR	(Agril. Extension) and SS&H.
Oilseeds	Gingelly	Low yield due to use of old traditional variety and poor ICM Practices	Demonstration of high yielding gingelly variety TMV 7, Seed treatment and soil application of bio fertilizers and bio	Variety	TMV 7	TNAU	Gingelly seed, Bio fertilizers, Bio control agents, and plant protection agents.	Gingelly seed – 5 kg Azospirillum – 1 kg, Phosphobacteria – 1 kg, Pseudomonas fluorescence – 1 kg, Light trap 1 No	4500	25	112500	Plants growth parameters, Yield, Economics and BCR	SMS(Soil Science) SMS (Agronomy) and SS&H.

			control agents											
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**9. Special Programmes : Nil**

## 10. Externally funded projects

### 10.1. Projects summary

S.No.	Title	Funding agency	Duration in years	Year of start	Total budget (Rs)	Current year budget (Rs)	PI
1	Livelihood improvement of resource poor farmers of Thogaimalai block	TNPL	2020-2021	2020	3,09,300	3,09,300	

### 10.2. Project details(Use one table per project)

Funding Agency	TNPL
State/Central/Over Seas	Karur
Title	Livelihood improvement of resource poor farmers of Thogaimalai block
Objectives	Soil and water management, organic input production, desi-bird rearing, value addition, nutrition garden
Study area	Livelihood
Methodology	Training following by demonstration and continuous handholding at individual farm level
Team Members	SMS(HSc),SMS(SS),SMS(ASc),SMS(Agro)
Budget	3,09,300

## 11. Trainings during 2020-21

### 11.1. Trainings for Farmers and Farm Women

S. No	Them atic area	Crop / Enter prise	Major problem	Linke d field interv entio n (OFT / FLD)	Training Course Title	No . of Co urses	Expec ted No. of partic ipants	Names of the team membe rs involve d
1	ICM	Paddy	Use of low yield traditional paddy variety IR 20 Low yield due to high incidence of pest and diseases to longer use of IR 20 paddy variety. Increases the production cost for use of more spray plant protection chemicals.	OFT & FLD	ICM in Paddy	2	40	SMS (Agronomy)
2	Water conser vation	Paddy	Reduced area of paddy cultivation due	OFT	Water conservation technology in	1	20	SMS(Agronomy)

			less water availability Reduce yield due to moisture stress at time of heading and harvesting stages Occurrence of pest and diseases in convention cultivation stagnation of more water		paddy			
3	ICM	Horse gram	Low yield due to farmers growing locally available seeds for longer period. Poor ICM practices	FLD	ICM in Horse gram	1	20	SMS(Agronomy)
4	Moisture conservation	Redgram	Low yield due to farmers growing locally available seeds for longer period. Poor flowering and pods setting due to moisture stress at respective stages	FLD	Moisture and drought mitigation techniques in Redgram	2	40	SMS(Agronomy)
5	ICM	Groundnut	Low yield due to poor germination use of local market variety, pest and disease incidence and moisture stress at pod formation stage	OFT, Training	ICM and Moisture conservation techniques	1	20	SMS(Agronomy)
6	Nutrient management	Paddy	Low productivity High cost of production Low Organic Carbon – 0.4%	OFT	Organic nutrient management in Paddy	1	20	SMS (SS), PAT, PAC
7	Water management	Groundnut	Poor quality irrigation water leads to deterioration of soil health Low yield	FLD	Irrigation water management	1	20	SMS (SS) PAT
8	Residue management	Redgram	Low yield due to imbalanced nutrient application and high deficiency of micronutrient cause pest and disease Lack of bio product residues management practice.	OFT	Composting technology	1	20	SMS (SS) PAT

			Air pollution and Bio wastes are burn in field					
9	INM	Tapioca	Low productivity due to deficiency of micro nutrients in soil , non adoption of ICM practices	OFT	INM in Tapioca	1	20	SMS (SS), PAT
10	INM	Fodder	Nutrient deficiencies leads to poor quality seed and fodder yield	FLD	INM in fodder	1	20	SMS (SS), PAT, PAC
11	Transfer of Technology	ICT	Problem for reaching out to farmers in COVID 19 lockdown period.	Training	Importance of Social media in technology dissemination	1	20	SMS(Agrl.Extn)
12	Farm Mechanization	Redgram	Higher incidence of pest and disease due to broadcasting the seeds.	Training	Tractor drawn pulse seeder in Redgram	1	20	SMS(Agrl.Extn)
13	Transfer of Technology	ICT	Problem for reaching out to farmers in COVID 19 lockdown period.	Training	Importance & uses of TNAU agritech portal	1	20	SMS(Agrl.Extn)
14	Health and Nutrition	Brinjal	Farmers are engaged in vegetables cultivation and they are frequently visiting markets, and are prone for more exposure to COVID 19.	Training	COVID 19 prevention techniques for vegetable growers	1	20	SMS(Agrl.Extn)
15	INM	Tapioca	Low productivity due to imbalanced nutrient application leading to low tuber quality	FLD	INM in Tapioca	2	40	SMS(SS)
16	Problem soil management	Ragi	Low yield due to problem soil ( pH – 8.32 & EC – 2.60 dS/m )High salt load in irrigation water	FLD	Problem soil management	4	80	SMS(SS)
17	ICM	Banana	Low productivity due to adoption of conventional cultivation methods, use of traditional varieties, micronutrient	OFT	Banana production technology under High density planting system with	2	40	SMS - Hort , SS&H PAT

			deficiency, incidence of pests and diseases, lack of intercropping and post harvest technology. High cost of production due to high cost of fertilizers, staking in conventional method.		intercropping vegetables			
18	ICM	Jasmine	Low yield, lack of awareness on off season flowering techniques and micronutrient deficiency	-	Proper pruning techniques and ICM crop cultivation techniques increase the flower yield	2	40	SMS - Hort, SS&H, PAT
19	ICM	Tomato	High pest, disease incidence and non adoption of ICM practices	OFT	Integrated Crop Management in brinjal	1	20	SS&H SMS Hort
20	ICM	Onion	Low yield due to imbalanced nutrient application, high incidence of pest and diseases.	OFT	Integrated Crop Management in Onion	2	40	SMS Hort
21	ICM	Brinjal	Low yield due to cultivation of local varieties and non adoption of ICM practices	-	Integrated Crop Management in Brinjal	2	40	SMS Hort
22	ICM	Chilli	Low yield due to cultivation of local varieties and non adoption of ICM practices	FLD	Integrated Crop Management in Chilli	2	40	SMS Hort
23	ICM	Turmeric	Low yield due to cultivation of local varieties.	OFT	Integrated Crop Management in Turmeric	2	40	SMS Hort
24	IPM	Paddy	Low yield due to incidence of pests and diseases, presence of	FLD	IPM in organic paddy	1	20	FM& SSH



			insecticide residues in grains and straw due to improper use of pesticides					
25	IPM	Maize	Low yield due to high incidence of fall armyworm. Indiscriminate application of insecticides.	FLD	IPM in maize	1	20	FM & SSH
26	IPM	Betelvine	Low yield due to high incidence of pest and diseases. Indiscriminate application of insecticides.	-	IPM in Betelvine	1	20	FM & SSH
27	IPM	Cotton	Low yield due to high incidence of pink bollworm and other pests. Inefficiency of chemical insecticides.	FLD	IPM in cotton	1	20	FM &SS&H
28	IPM	Coconut	Low yield due to high incidence of pest and diseases	-	IPM in coconut	1	20	FM &SS&H
29	IPM	Banana	Low yield due to high incidence of pest and diseases	-	IPM in Banana	1	20	FM &SS&H
30	Dairy Management	Dairy	Poor Health Management	-	Disease Management in dairy cows	1	20	SMS-ASc, SS&H
31	Dairy Management	Dairy	Poor udder Health Management	FLD	mastitis in dairy cows	1	15	SMS-ASc, SS&H
32	Dairy Management	Dairy	Repeat breeding and infertility	OFT	Reproductive management in dairy cow	1	20	SMS-ASc, SS&H
33	Poultry Management	Desi Bird	Poor health Management in desi bird	FLD	Health Management in Desi Bird	1	20	SMS-ASc, SS&H
34	Animal Nutrition Management	Dairy	Poor feed management & high cost feed	-	Feed and fodder management for dairy cows	1	20	SMS ASc, Agrl.Ext n
35	Feed & fodder technology	Dairy	Less Green fodder Availability Malnutrition, low milk yield,	-	Silage Preparation	1	15	SMS ASc, HSc
36	Disease Management	Sheep & Goat	Poor health Management	OFT	Disease management in sheep and	2	30	SMS ASc, HSc

	ement				goats			
37	Value addition	Banana	Low price during season	OFT	Banana flour preparation	1	13	SMS(H Sc),
38	Processing	Tomato	Low price during season	FLD	Value addition in tomato	2	24	SMS(H Sc)
39	Mushroom cultivation	Mushroom	Not available in market	OFT	Mushroom cultivation	1	15	SMS(H Sc) & FM
40	Value addition	Herbals	Low immunity	FLD	Preparation techniques of herbal tea	2	22	SMS(H Sc)
<b>Total</b>						<b>56</b>	<b>1054</b>	

### 11.2. Trainings for Rural Youth

S. No	Thematic area	Crop / Enterprise	Major problem	Linked field intervention (OFT/FLD)	Training Course Title	No. of Courses	Expected No. of participants	Names of the team members involved
1	Organic farming	Organic farming	High incidence of pest and disease its increasing gross cost to spraying more chemical	-	Organic farming and organic input production	1	20	SMS(Agronomy)
2	Moisture conservation	Cereals and oil seeds	Lack of awareness about drought tolerant varieties and implementing techniques	-	Moisture conservation and Drought mitigation techniques	1	20	SMS(Agronomy)
3	NRM	Soil health	Low fertility		Soil health management	1	20	SMS SS , PAT
4	Horticulture	Vegetables	Lack of awareness and	-	Importance of	1	20	SS&H SMS –Hort

			techniques regarding portraying method of vegetables seedlings production.		protected cultivation techniques for cultivation of vegetable seedling production using portray.			PAT
5	Employment generation	Mushroom	Low income. Unemployment	-	Mushroom production technology	1	12	FM
6	Poultry Management	Desi bird	Poor health Management in desi bird	-	Desi bird Farming	1	20	SMS- Asc, HSc
7	Poultry Management	Desi bird	Poor hatching in desi bird	-	Small Scale Hatchery Management	1	20	SMS- Asc, Agrl.Extn
8	Nutrition garden	Vegetables	Low intake of vegetables	FLD	Training on nutrition garden	3	35	SMs(HSc)
9	Value addition	Fruits and vegetables	Lack of knowledge	FLD/OF T	Value addition in fruits and vegetables	4	12	SMs(HSc)
<b>Total</b>						<b>14</b>	<b>179</b>	

### 11.3. Trainings for Extension Personnel

S. No	Thematic area	Training Course Title	No. of Courses
1	Production technology	Advance production and productivity technology in agri crops	1
2	Livestock Production	Infertility management in dairy cows	1
3	Livestock Production	ICAR KVK cattle fertility App	1
4	Horticulture	Advanced fertigation techniques and its maintenance in horticultural crops	2
5	TOT	Benefits of Social media in Agriculture	2
<b>Total</b>			<b>7</b>

#### 11.4. Skill trainings and vocational trainings during 2020-21

S.No.	Training title	Duration (Days)	No. of programmes	Sponsoring agency
1	Organic farming cultivation and organic inputs production	3	1	ICAR - KVK
2	Diversified poultry production	3	1	ICAR - KVK
3	Honey bee rearing	5	1	-
4	Processing of agricultural products	5	1	-
5	Production of vermicompost and its maintenance	7	1	ATMA
6	Organic farming cultivation and organic inputs production	5	1	KVK
7	Recent technologies in Vegetable cultivation	10	1	IOB, RSETI
8	Recent technologies in commercial Flowers cultivation	10	1	IOB, RSETI
9	Value addition in agricultural products	5	1	KVK
	<b>Total Courses</b>	<b>53</b>	<b>9</b>	

#### 11.5. Sponsored trainings

S.No.	Thematic area and the Crop/Enterprise	Training title	No. of programmes and Duration (days)	Type of Clientele*	Expected No. of participants	Sponsoring agency	Names of the team members involved
1	Organic farming	Production of vermicompost and its maintenance	1 (7 Days)	Rural youth	20	ATMA	SMS(SS)
2	Organic farming	Organic farming cultivation and organic inputs production	1 (5 Days)	Farmers and farm women, Youth	20	KVK	SMS(Agronomy)
3	Crop Production	Recent technologies in Vegetable cultivation	1 (10 Days)	Women, Youth	40	IOB, RSETI	SS&H, SMS - Hort, HSc, PAT, PAC
4	Employment generation	Recent technologies in	1 (10 Days)	Women, Youth	35	IOB, RSETI	SS&H, SMS - Hort, HSc, PAT, PAC

		commercial Flowers cultivation				
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## 12. Extension programmes during 2020-21

S. No.	Extension programme	No. of programmes	Team member involved
1	Advisory Services	850	All Staff
2	Diagnostic visits	28	All Staff
3	Field Day	5	All Staff
4	Group discussions	7	All Staff
5	Film Show	6	All Staff
6	Self -help group Meeting	5	All Staff
7	Exhibition	2	All Staff
8	Scientists' visit to farmers field	5	All Staff
9	Plant/Soil health camps	8	SMS - SS, PAT
10	Animal Health Camp	6	SMS ASc& PAT
11	Method Demonstrations	10	All Staff
12	Celebration of important days	4	All Staff
13	Exposure visits	4	All Staff
14	Kisan Mobile Advisory Services	50	All Staff
	<b>Total</b>	<b>990</b>	

## 13. Activities proposed as Knowledge and Resource Centre during 2020-21

### 13.1. Technological knowledge

S.No.	Category	Details of technologies	Area (ha)/ Number	Names of the team members involved
1	Demo Unit	Coconut Nursery	1500 nos	SMS(Hort)

### 13.2 Technological Products to be produced in KVK during 2020-21

S.No.	Category	Name of the product	Quantity (Qtl.)/ Number planned to be produced	Names of the team members involved
1	<b>Seeds</b>	COFS 29	3 q	SMS ASc
2		Desmanthus	0.5 q	SMS ASc
3		Paddy	20 q	FM, SMS Agron
4		Vegetable seeds	0.1q	SMS –Hort, Agrono
5	<b>Planting materials</b>	Vegetable Seedlings	40000 nos.	SMS Hort
6		CO4	2500 nos	SMS ASc
7		CO5	2500 nos	SMS ASc
8		Fruit saplings	30000 nos	SMS Hort
9		Coconut	3000 nos	SMS Hort
10	<b>Bio-products</b>	Azolla	5 q	PAC
11		Neem oil	100 lit	FM
12		Neem cake	1 q	FM
13		Neem seed kernel	1 q	FM
14		<i>Azospirillum</i>	2 q	SMS (SS)

15		<i>Rhizobium</i>	1 q	SMS (SS)
16		<i>Phosphobacteria</i>	2 q	SMS (SS)
17		<i>Trichoderma viride</i>	3 q	PAT
18		<i>Pseudomonas fluorescens</i>	3 q	PAT
19		<i>Metarhizium anisopliae</i>	1 q	PAT
20		Panchakavya	250 lit	SMS Agron
21		Fish Amino Acid	100 Lit	SMS Agron
22		Bio pesticide	200 Lit	SMS Agron
23		Vermicompost	30 q	SMS Agron
24		Vermiworm	0.1 q	SMS Agron
25		Vermiwash	50 lit	SMS Agron
26		Coir compost	50 q	SMS(SS)
27	<b>Livestock</b>	Desi bird chicks & live bird	300 nos	SMS ASc
28	<b>Value added products</b>	Millet cookies	0.4 q	SMS(HSc)
29	<b>Others</b>	Banana Special	7 q	PAT

### 13.3. Technological Information

#### 13.3.1. Technology backstopping to line departments

S.No	Category	Technological capsules / Number	Names of the team members involved
1	Literature/publication	10	All staff
2	Electronic Media	2	All Staff

#### 13.3.2. Publications

S.No	Category of publication	Number	Names of the team members involved
1	User guide leaflet – Social media	100	Dr.P.TamilSelvi& Dr.J.Diraviam
2	User information leaflet - TNAU Agritech portal	100	Dr.P.TamilSelvi& Dr.J.Diraviam
3	User information leaflet - COVID 19 prevention techniques	100	Dr.P.TamilSelvi& Dr.J.Diraviam

### 14. Additional (Collaborative) Activities Planned during 2020-21

S.No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
1	DAESI	Training	Training for Agri inputs dealers	800000	SS&H , FM

### 15. Revolving Fund

#### 15.1. Status of Revolving fund

Opening balance as on 01.04.2019 (Rs.)	Receipts during 2019-20 (Rs)	Expenditure incurred during 2019-20 (Rs.)	Closing balance as on 31.03.2020 (Rs.)
7.90626	22.50220	30.59924	16.00330

### 15.2. Plan of activities under Revolving Fund

S. No.	Proposed activities	Expected output	Anticipated income (Rs.)	Name of the team member involved
1	Paddy	20 q	100000	FM
2	Neem oil	100lit	50000	FM
3	Neem cake	1 q	3000	FM
4	Neem seed kernel	1 q	3000	FM
5	Vegetable Seedlings	40000 nos	14000	SMS Hort
6	Fruit saplings	30000 nos	900000	SMS Hort
7	Coconut	3000 nos	150000	SMS Hort
8	Azolla	5Qtl	25000	PAC
9	CO5 fodder slips	2500	2500	SMS ASc
10	CO4 fodder slips	2500	2500	SMS ASc
11	Co Fs 29	3 q	30000	SMS ASc
12	Panchakavya	250 lit	20000	SMS Agron
13	Fish Amino Acid	100 Lit	12000	SMS Agron
14	Bio pesticide	200 Lit	10000	SMS Agron
15	Vermicompost	30 q	24000	SMS Agron
16	Vermiworm	0.1 q	3500	SMS Agron
17	Vermiwash	50 lit	4000	SMS Agron
18	Masala powder	150 kg	12000	SMS(HSc)
19	Seeds	150 kg	20000	SMS(Agrl.Extn)
20	Edible oil	100 lit	25000	SMS(Agrl.Extn)
21	<i>Azospirillum</i>	2 q	12000	SMS (SS), PAT
22	<i>Rhizobium</i>	1 q	6000	SMS (SS), PAT
23	<i>Phosphobacteria</i>	2 q	12000	SMS (SS), PAT
24	<i>Trichodermaviride</i>	3 q	36000	PAT
25	<i>Pseudomonas flourescens</i>	3 q	36000	PAT
26	<i>Metarhizium anisopliae</i>	1 q	12000	PAT
27	Desi bird chicks & live bird	300 nos	35000	SMS ASc
28	Banana Special	7 q	112000	PAT

### 16 Activities of soil, water and plant testing laboratory during 2020-21

S.No.	Type	Through	No. of samples to be analyzed	Names of the team members involved
1	Soil	Min soil lab	450	SMS (SS), PAT
		Traditional SWT lab	150	SMS (SS), PAT
		AAS		-
2	Water		285	SMS (SS), PAT
3	Plant		50	SS & H, FM, PAT

### 17. Plan of activity for Institutional Farm

S.No.	Activity	Area (ha)	Names of the team members involved
1.	Paddy	2	FM
2.	Sapota	1	FM
3.	Acid lime	2.5	FM
4.	Guava	2	SMS Horti, FM

### 18. Demonstration units in KVK premises

S.No.	Name of Demo unit	Capacity for production (specify units)	Names of the team members involved
1	Desi bird unit	300 nos	SMS(ASc)
2	Brooding unit	300 nos	SMS(ASc)
3	Mushroom	1 q	FM
4	Hatchery Unit	100 nos	SMS(ASc)
5	Apiary	20 nos	FM
6	Model Kitchen Garden	10 Kg	SMS(HSc)
7	Solar Dryer	50 Kg	SMS(HSc)
8	Vermicompost unit	3 nos	SMS (Agrono)
9	Coir pith composting		
10	Azolla Production	5 q	PAC
11	Banana Special(MN Mixture) Production Unit	10q	PAT
12	Mini Oil Extraction unit	100 lit	SMS(Agrl.Extn)
13	Organic inputs production Unit	100 sqft	SMS (Agrono)
14	Japanese quail unit	100	SMS(ASc)
15	Pulvenizer	50Kg	SMS(HSc)
16	Flour mill	100Kg	SMS(HSc)

### 19. E-linkage activities status / proposed during 2020-21

Activity	Particulars	No. of farmers in database/ involved in activity/ downloads/ users etc
Website	Link: <a href="http://www.skvkk.org">www.skvkk.org</a>	2000
Mobile App	Name and link	
ICT initiative		
KVK portal (update status)	Infrastructure details & photos uploaded (no): 15 Events uploaded:2757 News items submitted:	
KVK mobile App of ICAR	Downloaded and used by scientists (no.)	
Other mobile Apps in use by KVK		
mKisan of DAC & FW		
Social media		
a) Whatsapp groups	No. of groups/KVK:3	717



b) Facebook	Link: <a href="https://www.facebook.com/karur.kvk">https://www.facebook.com/karur.kvk</a> <a href="https://www.facebook.com/profile.php?id=100037721510514">https://www.facebook.com/profile.php?id=100037721510514</a> <a href="https://www.facebook.com/profile.php?id=100037970423863">https://www.facebook.com/profile.php?id=100037970423863</a>	1524 5000 64
c) Twitter	Handle name:	
Membership / participation in online digital platforms for services/ marketing etc.		
KVK Blogs etc.		
Collaboration with public/ private firms for audio/ video conferencing etc	Agency: MoU (yes/no): No. of programs done:	

## 20. Farmer's Field School planned

S. No	Thematic area	Title of the FFS	No. of members in FFS group	Budget proposed in Rs. In lakhs
1	ICM	Farmer field and business school on Coconut	15	20000

### Details of FFS

#### 21. Details of Innovative Farmers network established

#### 22. Budget - Details of budget utilization (2019-20) up to 31 March 2020 (Rs.)

S. No.	Particulars	Sanctioned	Released	Expenditure
<b>23.1</b>	<b>Recurring Contingencies</b>			
23.1.1	Pay & Allowances	12251000	12251000	12251112.00
23.1.2	Traveling allowances	130000	130000	130000.00
<b>23.1.3</b>	<b>Contingencies</b>			
23.1.4.	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance	400000	400000	241478.00
A				
B	POL, repair of vehicles, tractor and equipments			158522.00
C	Meals/refreshment for trainees			42934.00
D	Training material			8034.00
E	Frontline demonstration except oilseeds and pulses			152256.00
F	On farm testing			87296.00
G	Extension Functionaries	475000	475000	8806.00
H	Farm Maintenance			33412.00
I	Extension Activity			79170.00
J	Library			4920.00
k	Farmers Field School			6805.00

<i>L</i>	Integrated Farming System			6380.00
<i>m</i>	Soil Health Card System (SHC)			44987.00
<i>n</i>	SCSP Component	205000	205000	205000.00
<b>23.1</b>	<b>Total Recurring</b>	<b>13461000</b>	<b>13461000</b>	<b>13461112.00</b>
<b>23.2</b>	<b>Non-Recurring Contingencies</b>			
	<b>Works</b>			
	a SCSP Component (Creation of Physical Assets/Repairs/Renovation)	142000	142000	142000.00
23.2.2	<b>Equipments including SWTL &amp; Furniture</b>			
a	<b>Office Automation</b>			
b	<b>Furniture &amp; Fixtures</b>			
23.2.3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify)			
23.2.4	<b>Library</b>			
<b>23.2</b>	<b>Total Non Recurring</b>	142000	142000	142000.00
<b>23.3</b>	<b>REVOLVING FUND</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>23.4</b>	<b>GRAND TOTAL (A+B+C)</b>	<b>136031000</b>	<b>136031000</b>	<b>13603112.00</b>

### 23. Details of Budget Estimate (2020-21) based on proposed action plan

S. No.	Particulars	BE 2020 - 21 proposed (Rs.)
<b>24.1</b>	<b>Recurring Contingencies</b>	
24.1.1	<b>Pay &amp; Allowances</b>	12741000
1		
24.1.2	<b>Traveling allowances</b>	130000
2		
24.1.3	<b>Contingencies</b>	
3		
<i>a</i>	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	500000
<i>b</i>	POL, repair of vehicles, tractor and equipments	
<i>c</i>	Meals/refreshment for trainees (ceiling up to Rs.40/day/trainee be maintained)	
<i>d</i>	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	
<i>e</i>	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	
<i>f</i>	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	
<i>g</i>	Training of extension functionaries	
<i>h</i>	Farm maintenance	
<i>i</i>	Extension Activity	

<i>j</i>	Soil Health Card System	905000
<i>k</i>	Library	
<i>l</i>	Farmers Field School	
<i>m</i>	Integrated Farming System	
<i>n</i>	Publications of extension literature	
<i>O</i>	Android app development	
<i>P</i>	Website updating and revamping	
<i>q</i>	EDP	
<i>r</i>	Honorarium for Training	
<i>s</i>	DFI Programme	
<i>t</i>	SCSP Component	
<b>24.1</b>	<b>TOTAL Recurring Contingencies</b>	<b>14276000</b>
<b>24.2</b>	<b>Non-Recurring Contingencies</b>	
	SCSP Component (Creation of Physical Assets/Repairs/Renovation)	150000
<b>24.2</b>	<b>TOTAL Non-Recurring Contingencies</b>	<b>150000</b>
24.3	REVOLVING FUND	0
<b>24.4</b>	<b>GRAND TOTAL</b>	<b>14426000</b>