ACTION PLAN 2019 - 20

FOR THE PERIOD
APRIL 2019 to MARCH 2020

ICAR – KRISHI VIGYAN KENDRA
Hosted by SCAD
Thoothukudi District, Tamilnadu

PROFORMA FOR ACTION PLAN OF KVKs IN ZONE X FOR 2019 – 20

1. General information about the Krishi Vigyan Kendra

1.1	**Name and address of KVK with Phone, Fax and e-mail**	:	Krishi Vigyan Kendra, Social Change and Development (SCAD) Vagaikulam, Mudivaithanendal Post, Thoothukudi 628102 Phone and Fax: 0461-2269306 Email: pcscadkvk@gmail.com Website: www.scadkvk.org
1.2	**Name and address of host organization**	:	Social Change And Development Bye Pass Road, Vannarpettai, Tirunelveli Ph: 0462-2501008, Fax: 0462-2501007 Email: scb_scad@yahoo.com
1.3	**Year of sanction**	:	1995
1.4	**Website address of KVK and date of last update**	:	www.scadkvk.org 31 – 03 – 2019

2. Details of staff as on date

Sl. No	Sanctioned post	Name of the incumbent	Discipline	Existing Pay band	Grade Pay	Date of joining	Permanent/ Temporary
2.1	Senior scientist and Head	**Vacant**					
2.2	Subject Matter Specialist & SS & H i/c	Dr. V. Srinivasan	Animal science	15600-39100	5400	08.07.1999	P
2.3	Subject Matter Specialist	S. Sumathi	Home science	15600-39100	5400	01.12.2000	P
2.4	Subject Matter Specialist	P. Velmurugan	Horticulture	15600-39100	5400	30.01.2001	P
2.5	Subject Matter Specialist	A. Murugan	Agronomy	15600-39100	5400	18.07.2011	P
2.6	Subject Matter Specialist	P. K. Muthu Kumar	Plant protection	15600-39100	5400	17.11.2018	P
2.7	Subject Matter Specialist	C. Bhagavathsingh	Agriculture extension	15600-39100	5400	12.11.2018	P
2.8	Lab Technician	I. Jeyakumar	Lab Assistant	9300-34800	4200	12.07.2013	P
2.9	Computer Programmer	J. Jove	Computer science	9300-34800	4200	01.04.2011	P
2.10	Farm Manager	K. Dhamodharan	Agriculture	9300-34800	4200	31.08.2009	P
2.11	Assistant	S.S. Ganesan	-	9300-34800	4200	01.06.1996	P
2.12	Stenographer	A. Siva Bala Subramanian	Stenographer	7510-20200	2400	12.11.2018	P
2.13	Driver 1	A. Dominic James	-	5200-20200	2000	01.06.1996	P
2.14	Driver 2	A. Gulam Rasul	-	5200-20200	2000	01.07.1996	P
2.15	Supporting staff 1	K. Rajeswaran	-	5200-20200	1800	01.12.1996	P
2.16	Supporting staff 2	V. Xavier		5200-20200	1800	12.11.2001	P

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

Sl. No.	Name and Designation of the SAC member	Recommendations	Action Taken Report to be return by staff concerned
1.	Dr. H. Philip, DEE, TNAU, Coimbatore	In the visitors book a column should be added to check weather their purpose of visit is solved or not	Adhered as recommended
2.		The farmers data base collected and documented are very low (750 plus), the computer programmer should collect all the details of farmers visiting KVK. Since the Data base is very much essential to KVK, he should focus on this area in the coming days.	2358 farmers data base is now available at KVK and the process continues and we will cover 5000 farmers database in this year 2019-20
3.		Impact on technologies transferred from KVK should be submitted, How many technologies disseminated, what's the adoption rate, why they are not following it etc should also be there in the impact study report	KVK conducted impact studies on technologies transferred in the last 4years with respect to varietal introduction, poultry introduction, green fodder , bio input usage, promotion of fruit trees
4.		Out of 50 trained on vermicompost preparation only 12 are producing vermicompost. KVK should find and study why the other 38 are not following it up.	Adoption level very low due to the very low rainfall, 19 trainees could not start Vermicomposting as they did not have cattle in their farm to produce Vermicompost and 19 trainees did not start as they felt this process in cumbersome and needs investment for providing shade and construction of tank, purchase of silpaulin sheet, etc
5.		The nutrition programme should be tried in boarding school to study the real impact created through nutrition intervention	Nutrition intervention will be carried out in boarding school for adolescent girls after obtaining permission from CEO and with their help we will select a few suitable boarding school for the purpose. Initially baseline survey will be conducted to study the nutritional status (Anaemic) of adolescent girls in those schools. Then nutrition interventions will be initiated in the school where more number of anaemic/malnourished children are studying. A feasibility report will be submitted at the start of new academic year by June 2019 for the purpose.
6.	Dr. Y. G. Prasad, Director, ICAR-ATARI, Zone X Hyderabad	Successful OFTs should be converted into FLD to popularize the technology	OFT on alternative poultry rearing was converted into FLD in the year 2019-20 OFT on Paddy variety TKM 13 is converted into FLD in 2019-20 OFT on estruous synchronization using prosynch NC tech. was converted into FLD in 2019-20 OFT on assessing green gram variety was converted into FLD this year
7.		Participation of all line departments with special reference to Horticulture and fisheries Department should be ensured in future meetings.	Will be adhered as recommended
8.		House hold focus should be given to increase the farm income.	House hold base line detail was collected in DFI village for the purpose , SMS AE and Agronomy to create and maintain the file as required for the purpose
9.		KVK should make diagnostic visit with line department officials to control FAW.	Joint diagnostic visit was made to the following villages along with department officials : Deivaseyalpuram, Pottalurani,

			Poovani, Kadambur cluster Apart from this KVK has displayed control measures in digital banner in Ottanatham, vilathikulam, TN kulam, Poovani clusters for FAW control
10.		Cost of pesticide spray should be brought down in pulses.	KVK promotes IPM modules to bring down the cost of pesticide spary, 12 training programe was conducted in adopted villages during the cropping season in 2018
11.		KVK should concentrate on selective farm mechanization.	KVK promotes total mechanization in dry land pulses cultivation from sowing to harvest,
12.		Micro irrigation in paddy should be promoted, an OFT should be planned.	This year an OFT is planned for the Micro irrigation system in paddy 2019-2020 at KVK farm
13.		Crop cafeteria should be established in KVK.	During the year in Rabi season following crop will be sown in the cafeteria : black gram, green gram, pearl millet, sorghum, bhendi, chilli, ground nut as suggested.
14.		Paid training numbers should be increased and the training should help promoting entrepreneurship.	. In the year 18-19, 29 paid training were organized for 312 farmers/youth and generated Rs.36300 as revenue through these programmes and added in revolving fund.
15.		Since sharing of information is very important, KVK staff should make visits and consult with the staff of all the Institutions, Research Stations etc to create good rapport with them.	Frequent visit are made to meet the experts in VCRI, Tirunelveli, ACRI Killikulam, ARS kovilpatti, to get technological information and to identify the problems and solving the issues frequent meeting with line department officials especially Agriculture and agriculture marketing was made during ATMA training programmes.
16.		A study on value chain, supply chain systems, constraints, various stake holders, govt role in the supply chain system in district, state level should assessed by KVK. Prosopis, palmyrah, millets supply and value chain should be studied and submit a report to ATARI.	Prosophis value chain was assessed and will be submitted to ATARI
17.		Recycling agriculture waste should be given priority in the coming days.	We have promoted waste decomposer to 40 farmers from October to March 2019 . Our KVK is also promoting vermicomposting, composting using Beneficial microbes through KVK training programmes
18.		KVK Thoothukudi can help the farmers in the technological know how on the value addition aspects otherwise they have to travel to very distant locations like Hyderabad or Tanjore for the purpose.	KVK at present is not having fully equipped food processing unit and at present we are conducting simple value addition technologies through hands on training programme at our KVK with minimal machineries and equipments. In future (by July 2019) as per the recommendation KVK will submit a proposal for establishing minimal processing and value addition incubation unit to MOFPI (Ministry of Food Processing Industry) . A specific sponsored programme will be organized to take interested trainees to visit

			different value addition training centers at Thanjavur, Hyderabad, and Ludhiana. We will also invite the experts from food processing institute to KVK for transferring necessary skill through sponsored training programmes.
19.	Mr. Nagarajan, Dy.Director, Agri business	Since banana sheath/bark has much potential, KVK should create awareness on this to the banana growers and explore possibilities in creating entrepreneurship	KVK is creating awareness about this issue among Banana growers. In addition to this, KVK has organized a buyer seller meet to utilize banana bark on March 2019. Due to this effort, a business plan is on trial to mobilize the Banana barks from the farmers to Bangalore based Industries crafts foundation. KVK is providing moral support to the Perunthalaivar FPCL in this business activity.
20.		TKM13, a fine grain paddy variety can be promoted in a larger way.	We have planned to produce 10 quintal TKM13 seed.in 19-20
21.	Dr. Ramalingam,Dean, ACRI, Killikulam	Cultivating Casuarinas as inter crop in Banana will be of great help to support the banana plantations. While planting banana casuarinas seedlings can also be planted along to help in scaffolding.	A trial with 10 farmers at Manjal neerkayal village will be initiated to study the feasibility during this year. The result will be uploaded in KVK portal.
22.	Dr.R.Srinivasan, GM, TNPL, Karur	TNPL is ready to provide the seedlings to create an agro forestry model at KVK under its capital farming scheme.	25 acres of land is earmarked for establishing agro forestry in KVK instructional farm planting will be done during 19-20
23.		Thoothukudi has potential to grow Subabul, KVK can promote trees like casuariana, subabul, eucalyptus, meliaazadiracta on contract basis. TNPL will procure the material from farmers.	This message will be spread in the KVK training programmes to invite interested farmers to take up agroforestry in their farm.
24.		Animal husbandry department is implementing important schemes in fodder development (Azolla, hydroponics, fodder seeds/seedlings) and backyard poultry promotion in this year , KVK can spread this message to the needy farmers through its contact.	Information regarding schemes like free backyard poultry, hydroponics, azolla rearing ,etc.. Were disseminated to the trainees and KVK contact farmers and also for the KVK adopted villages.
25.	JD(AH), Thoothukudi	KVK's help is required in marketing the guava fruits for better prize	Efforts are on to train and procure 1000 nos of L-49 guava grafts from his field to KVK during Sep-October 2019
26.	Mr.Narayanasamy, Farmer, Kollankinaru	KVK and Agri marketing should help to market the processed minor millet products.	KVK is providing technical support to Perunthalaivar FPCL in processing minor millets and making it to Nutri mix. They are advised to market through super markets. Similar activity will be initiated through other FPCL
27.	Mr.Subbaraman, Chairman, FPC, Ottanatham	KVK should popularize the micro sprinkler system of irrigation to paddy.	paddy demo unit using micro irrigation will be established at KVK in the year 19-20
28.	Mrs. Tamil Malar, JD i/c Department of Agriculture	KVK should help the department to promote TKM 13 paddy variety.	We have planned to produce 10 quintals of TKM13 seed.
29.		Since department is giving subsidy to plant trees (Rs.17,000 for neem, Rs.20,000 for pungam) KVK can pass on this information to the interested farmers.	Information on this scheme is being informed to the trainees and contact farmers and also through what's app groups
30.		KVK should help the department to create awareness on FAW infestation in maize	FAW control measures are being highlighted in all the ATMA training.
31.		KVK should give more focus on dry land farming ARS is ready to coordinate with KVK to conduct	KVK forwarded the weather based advisory to its contact farmers in

		weather based farming technique.	Whatsapp group, during 19-20 planned to send the same in m-kissan SMS services, and to keep information board in KVK adopted villages namely TN Kulam, Rajapudukudi, Villiseri, Kumarapuram, Kootampuli, Athimarapatti
32.	Dr. Sudhakar, ARS, Kovilpatti	KVK can promote K12 sorghum in larger areas.	In 2019-20, a FLD program has been proposed in K12 Sorghum and we have planned to produce 10 quintal Sorghum K-12 seed in coming monsoon.
33.		VCRI, Tirunelveli is supplying poultry chicks, feeds etc. KVK can promote the Japanese Quail rearing, and fodder production in Thoothukudi district through trainings.	9 training programme on alternative poultry rearing was organized during 18-19 to 175 farmers and youth .
34.	Dr. Dhanaseelan, P&H Ag.extension department, VCRI, Tirunelveli	KVK can send the interested people to the training programmes of CMFRI	Will be done on need basis
35.	Dr.Asha, Principal scientist, CMFRI, Thoothukudi	NABARD is ready to provide funding support for training programmes and research proposals to KVK.	2 CAT training programmes were organized during Jan and Feb 2019 with NABARD support. 6 more was planned during 19-20 and one research proposal on wood vinegar will be submitted in 19-20. Rural mart proposal was submitted in 19-20
36.	Mr. K. Vijayapandian, DDM, NABARD, Thoothukudi	KVK should organize training programme on value addition of banana other than pickle.	KVK has organized a buyer seller meet to utilize banana bark during March 2019 and trying to make MOU between FPC and the Buyers
37.	Mrs. Seema pandiayan, women farmer representative , Kootampuli	KVK should help to market the palmyrah palm tuber based products	Rural mart will be established with the support of NABARD for marketing SHG products
38.	Mrs.Shenbagavadivu, women farmer representative , Vembar	KVK should help to market the hair oil produced by their SHG	In the upcoming year specified OFT program will be initiated with guidance from ATARI
39.	Mrs. Uthami, women farmer representative, maravanmadam	Farmers are in need of simple technologies to control FAW infestation in maize and KVK should help in this regard.	
40.	Mr.Madasamy, Farmer representative, Vanmalai FPC, Vilathikulam	KVK should establish a good roof garden ,	KVK already has a roof garden on the staff quarters and it needs protection from peacock menace and this will be done in this year to improve its efficiency
41.	Dr. S. K. Gopal, Advisor , SCAD	Can promote curry leaf cultivation and calf rearing in a larger way	Curry leaf seedling production will be taken up in KVK during 2019-20 KVK has increased its heifer calf rearing unit size to rear 10 calves at present KVK has one FLD programme to promote calf rearing in the year 2019-20 and 2018-19
42.		KVK should ensure the adaptation of STL based manure application.	54% of the farmers who awarded with SHC adopted STL based manure application in their field as per our sample study
43.	Dr. Baskaran, Principal scientist, ICAR –ATARI, Zone X, Hyderabad	KVK can print the pest and diseases and their control measures and include it along with soil health card.	We have planned to execute in the upcoming season and the same will be issued along with SHC
44.		KVK should focus to obtain the maximum yield in all OFT, FLD and the complete package	Maximum yield was obtained in FLD and OFT programmes conducted during

		should be provided to achieve this.	the year 18-19 because of complete package of practice given to them as suggested
45.	Mr. Ignatius Xavier, General Manager , SCAD Group of Institutions	The farmers approaching KVK should get the benefit for their visit, KVK should help the farmers in all possible aspects.	The farmers visiting the KVK are received in kind manner at the entrance itself and they are satisfied as per their purpose of visit. The scientists are giving contact numbers to easily solve farm related queries if any. A separate note is maintained to monitor their purpose of visit and same is reviewed by SS &H periodically with the help of supporting staffs.

4. Capacity Building of KVK Staff

4.1 Plan of Human Resource Development of KVK personnel during 2019 - 20

Sl. No	New Areas of Training	Institution proposed to attend	Proposed date of training
1	Post harvest management and Storage techniques	NIPHM, Hyderabad	17-21.07.19
2	Workshop on Electronic National Agricultural Market (e-NAM)	MANAGE Hyderabad	04-05.07.19
3	Technologies for Farmers' Income in Salt affected Soils	ICAR-CSSRI, Karnal, Haryana	02-06.07.19
4	Advances in Weed Management	NIPHM, Hyderabad	15-17.08.19
5	Medicinal and Aromatic plants: Cultivation, Processing and Value addition	DEE, JNKVV, Jabalpur, Madhya Pradesh	26-30.08.19
6	Workshop on doubling farmers income : Strategies on Dry Land Agriculture	MANAGE, Hyderabad	04-05.09.19
7	Training Program on good agricultural practices and current strategies for improved agro chemical use and management	ICAR-NIBAM, Raipur, Chhattisgarh	23-27.09.19
8	Livestock health and production for National food security	NDVSU, Jabalpur, Madya Pradesh	24-28.09.19
9	Capacity building of Field Functionaries on diversified poultry production and processing technologies	ICAR- CARI, Barelly, Uttar Pradesh	16-20.12.19
10	Value addition of Tomato and Onion	IIFPT – Thanjavur	6.8.2019
11	Value addition and packaging of Fruits and Vegetables	IIFPT – Thanjavur	23.09.2019 - 27.09.2019

4.2 Cross-learning across KVKs during 2019 - 20

S. No	Name of the KVK proposed	Specific learning areas
4.2.1	Within ring KVK Madurai , Virudunagar	Mechanization in agriculture, Value addition for millet products , dry farming interventions
4.2.2	Within the zone KVK Erode, Karur	FPOs, organic farming, IFS, mechanization
4.2.3	Outside zone – Baramathi KVK and Ahmednagar	To learn about effective usage of ICT tools in transfer of technology

5. Proposed cluster of KVKs (3 to 5 neighboring KVKs) to be formed for sharing knowledge/expertise, resources and activities during 2019 - 20

Sl. No	Name of the KVKs included in the cluster	What do you intend to share with Cluster KVKs	What do you expect from Cluster KVKs
5.1	KVK, Viruthunagar and Ramnad	Prosopis juliflora pod as animal feed and fish culture in ponds BM usage, Kitchen garden	Information in dry land technologies
5.2	KVK, Kanyakumari	Banana cultivation, BM usage, Kitchen garden	Information in flower cultivation and marketing
5.3	KVK, Madurai	Banana cultivation, BM usage, Kitchen garden	Expertise in Honey bee and banana fiber product preparation

6. Operational areas details proposed during 2019 - 20

Sl. No	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (Ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Proposed Intervention (OFT, FLD, Training, extension activity etc.)*
1	Paddy	• Low level of awareness on high yielding new varieties (92%) • Susceptible to Bacterial leaf blight – Yield loss 30-40 % • Lack of awareness long duration fine grain varieties (60%) • Ruling fine varieties BPT -5204 (70%) • low yield from the existing ruling Variety BPT 5204 (4350 kg/ha) • Continuous usage of local seeds, Poor cultivation practices (78%)	2700ha	Rajapudukudi -52ha TN.Kulam-105 ha	Training and Advisory services
2	Groundnut	• Labour shortage for harvesting • Pest and disease incidence 65% • Continuous usage of local seeds • Lack of awareness on gypsum application • Low level of awareness on improve, high yielding varieties • Labour shortage for harvesting	1183ha	TN.Kulam-42 ha Rajapudukudi- 25ha Therkumayilodai 37ha (TN kulam cluster DFI village)	OFT, CFLD , extension activities Training and Advisory services
3	Bengal gram	• Continuous usage of local seeds 85% • Low level of awareness on improve, high yielding varieties 90% • Low level of awareness on short duration drought resistant rain fed varieties 85 %	100ha	Kollanginaru 10ha	OFT, extension activities, Training and Advisory services
4	Sorghum	• Low productivity in K-8 variety (990Kg/ha) • Crop losses in existing commercial hybrids due to drought condition in later stage of this crop growth (50%) • High cost and non availability of Commercial hybrid seeds • Late maturing longduration commercial varieties invites midges attack (55%)	13500ha	Kumarapuram -360 ha	FLD, extension activities Training and Advisory services

5	Pearl millet	• Low productivity in existing variety (890 Kg/ha) • Crop losses in existingcommercial hybrids due to drought condition in later stage of this crop growth (50%) • High cost and non availability of Commercial hybrid seeds	14000ha	Kollanginaru 265	FLD
6	Maize	1)Heavy incidence of FAW 780% 2)Lack of awareness on IPM practices 3)Poor yield due to FAW damage	25500ha	Villiseri 350ha	OFT, training and advisory services
7	Chilli	1) Indiscriminate use of insecticides against sucking pest 2)Yield loss upto 36% due to sucking pest incidence	14744ha	Kollanginaru 20ha	OFT, training and advisory services
8	Cotton	1) Over use of insecticides and lack of awareness about IPM against sucking pest and stem weevil 2) Yield loss upto 40%	12150ha	TN Kulam 102 ha	FLD, training and advisory services
9	Green Gram	1) Lack of awareness on IDPM 2) Yield loss upto 35%	29173ha	Kumarapuram -268 ha	FLD, training and advisory services
10	Black Gram	1) Lack of awareness on IDPM 2) Yield loss upto 35%	32177ha	Kollanginaru - 306 ha	Training and Advisory services
11	Guava	• Low market price of L-49 fruits (Rs.15-20/kg) • Low consumer preference (50%) • Low income (75%) • Incidence of nematode (20%)	150ha	Kollanginaru 5ha	OFT, Training and Advisory services
12	Lemon	• Drudgery involved in Lemon fruit plucking (80%) • Little or no awareness on fruit harvester (90%) • Non availability of fruit harvesters in local stores (95%) • Damage to the branches and fruits	1200ha	Villiseri 140ha	OFT, Training and Advisory services
13	Lemon	• Lack of awareness on new pesticides & IDPM	1200ha	Villiseri 140ha	FFS, training and advisory services
14	Jasmine	• low –nil production during Nov- Feb in J.sambac • Lesser market price during peak production period • No Known varieties with off season production	325ha	Rajaputhukudi 18ha	FLD, Training and Advisory services

		capabilities • Little awareness on Improved / new varieties			
15	Bhendi	• Little awareness on alternate crops for quick yield and income (80%) • Flower and fruit drop in long duration crops due to water stress • Low income	125ha	Rajaputhukudi	FLD, Training and Advisory services
16	Bhendi	• YMV Attack on local M-10 variety (75%) • Low productivity (14.8ton/ha) • Little awareness on YMV resistant varieties(80%)	125ha	Rajaputhukudi	OFT, Training and Advisory services
17	Bottle gourd	• High cost of pandal erection (Rs.47600/ac) • Fruit fly and powdery and downy mildew attack (80%) • Little awareness on resistant varieties	16ha	TN Kulam	FLD, Training and Advisory Services
18	Banana	• Conventional Technology transfer mechanism is not effective in catering the need of individual farmer on time. • Inconsistency in availing information • Dependency of farmer on numerous specialist to get information in decision making • Non availability of appropriate learning material and lack of awareness on e extension tools	7379ha	Kootampuli	OFT, Training and Advisory services
19	Mobile based market information	• Lack of awareness on market price • Availability of services and their source were not known to the farmers • Unavailability of Information when farmer need it		Villiseri / Rajaputhukudi	OFT and Training
20	Small ruminants	• Development of resistance to commonly available dipping acaricide solutions (65%) • Mortality in kids due to tick and lice infestation (30%) • Low body weight gain in kids (25%)	2,00,000	Kumarapuram (800 goat) and Rajaputhukudi (650 goat)	OFT, Training and Advisory services
21	Green fodder	• Lack of green fodder feeding during dry season • Lack of awareness on nutritive mixed fodder	3240 ha	Rajapudukudi and Villiseri (25 ha)	FLD, Training and Advisory services

		production • Existing practice of cultivating sorghum alone as green fodder during summer months			
22	Cattle	• Lack of knowledge on neonatal management and mortality in calves (50%) • Poor calf growth rate (30%)	50000	Rajaputhukudi and Villiseri	FLD, Training and Advisory services
23	Cattle	• Delayed inseminations (60%), • Repeat breeding (20%), • Infertility (20%)	12500	Rajaputhukudi and Villiseri	FLD, Training and Advisory services
24	Chicks	• Low income (65%) • Low body weight gain (20%), • Low egg production (20%) • Less preference for cross bred chickens	185000	Rajaputhukudi and Kumarapuram	FLD, Training and Advisory services

7. Abstract of Assessment proposed for the year 2019 - 20

Sl. No	Crop	Title	Village	Amount
1	Groundnut	Assessing the suitability of high yielding short duration Groundnut varieties	TN Kulam	11050
2	Bengal gram	Assessment of the performance of high yielding Bengal gram varieties	Kollanginaru	14750
3	Maize	Assessment of Management Practices to Control the FAW infestation in Maize	Kollanginaru	14000
4	Chilli	Assessment of Eco-friendly Pests Management in Chilli	Kollanginaru	5550
5	Bhendi	Assessment of yield potentials of high yielding Bhendi Hybrids	Rajaputhukudi / TN Kulam	12115
6	Guava	Assessment of yield and income potentials of Red flesh Guava varieties	Kollanginaru	23375
7	Acid Lime	Assessment of the efficiency of fruit harvesters	Villiseri	6250
8	Mobile App	Assessing the effectiveness of e-Extension Tools in terms of Knowledge Gain and Symbolic Adoption Behavior among the Banana Growers	Kootampuli	1500
9	Mobile App	Assessing the Effectiveness of Different Mobile Apps in terms of Knowledge Gain on market information among Medium and large Farmers	Villiseri	1000
10	Goat	Assessment of different herbal preparations for the control of ectoparasites in small ruminants	Kumarapuram / Rajaputhukudi	6200
11	Palmyra	Alternative natural sweetener for snack products	Kootampuli	5000
12	Paddy	Assessment of different irrigation system in paddy	KVK farm	32750
Total				**133540**

8. Technology Assessment during 2019 - 20

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Team members	No. of trials	Parameters to be studied
1	Groundnut	• Continuous usage of local seeds • Low level of awareness on improved, high yielding verities • Labour shortage for harvesting • Pest and disease incidence 65% • Lack of awareness on gypsum application	Assessing the suitability of high yielding short duration Groundnut varieties	SMS (Ag, AE)	5	No of plant /m^2 Plant height 50% flowering No of pod /plant No of seed /pod Yield Duration B:C ratio

	Technology options		Source of Technology	Name of critical input	Qty per trial	Cost per trial	Total Qty	Total Cost (Rs.)
	T1	TMV-7	TNAU	VRI -8	10 Kg	1000	50 Kg	5000
	T2	VRI -8	TNAU - 2016	ICGV - 00350	10 Kg	1000	50 Kg	5000
	T3	ICGV00350	ICRISAT 2011	Field board	1 No	350	3 No	1050
	TOTAL					**2350**		**11050**

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Team members	No. of trials	Parameters to be studied
2	Bengal gram	• Low Production • Low level of awareness on ICMP • Low level of awareness on improved, high yielding varieties 90% • Low level of awareness on short duration, drought resistant, rain fed varieties 89 % and Crop loss due towilt incidence 40%	Assessment of the performance of high yielding Bengal gram varieties	SMS (Ag, AE)	5	No of plant / m^2 Plant height 50% flowering No of pod /plant No of seed /pod Yield Duration B:C ratio

	Technology options		Source of Technology	Name of critical input	Qty per trial	Cost per trial	Total Qty	Total Cost (Rs.)
	T1	Co -4	TNAU	Co -4	10 kg	700	50 Kg	3500
	T2	BGD -103	UAS Dharwad 2014	BGD -103	10 Kg	700	50 Kg	3500
	T3	Dheera NBeG-47	ARS Nandiyal 2017	Dheera	10 Kg	700	50 Kg	3500
				Pheramone trap for H.armingera	5	500	25	2500
				Field board	1 No	350	5 No	1750
	TOTAL					**2950**		**14750**

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Team members	No. of trials	Parameters to be studied
3	Maize	• High incidence of FAW (>80%) • Lack of awareness on IPM practices • Poor yield (1500 Kg/ha)	Assessment of Management Practices to Control the FAW infestation in Maize	SMS (PP)	5	Pest incidence (%) Yield Q/ha Benefit Cost Ratio

	Technology options		Source of Technology	Name of critical input	Qty per trial	Cost per trial	Total Qty	Total Cost (Rs.)
	T1	Farmer Practices		Pheromone trap	2 No	200	10	1000
				Cyantriniliprolea.i 19.8% w/w + Thiomethoxam a.i 19.8% w/w	16 ml	375	80 ml	1875
				Entomopathogenic nematode	2.5 Kg	1250	12.5 Kg	6250
				Metarhizium anisopliae	0.5 Kg	250	2.5 Kg	1250
	T2	IPM Technology	TNAU & ATARI Zone X	Thiodicarb	150 ml	375	750ml	1875
				Field board	1 No	350	5	1750
	TOTAL					**2800**		**14000**

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Team members	No. of trials	Parameters to be studied
4	Chilli	• Thrips, Aphids, mites incidence cause yield loss up to 36% • Indiscriminate use of insecticides • Lack of awareness about Integrated pests managements	Assessment of Integrated Pests Management in Chilli	SMS (PP)	5	Pest incidence (%) Yield Q/ha Benefit Cost Ratio

Technology options		Source of Technology	Name of critical input	Qty per trial	Cost per trial	Total Qty	Total Cost (Rs.)
T1	Farmer Practices	**TNAU, 2013**	Pheromone trap	4 no	400	20 No	2000
			Beauveria bassiana	500g	250	2.5 Kg	1250
T2	IPM Technology	**NCIPM, 2014**	Blue sticky trap	2 No	110	10 No	550
			Field board	1 No	350	5 No	1750
TOTAL					**1110**		**5550**

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Team members	No. of trials	Parameters to be studied
5	Bhendi	• YMV Attack on local M-10 variety (75%) • Low productivity (14.8ton/ha) • Little awareness on YMV resistant varieties (80%)	Assessment of yield potentials of high yielding Bhendi Hybrids	SMS (Horti)	5	Occurrence of YVMV % Yield per plant Yield /unit area BC ratio

Technology options		Source of Technology	Name of critical input	Qty per trial	Cost per trial	Total Qty	Total Cost (Rs.)
T1	Farmer Practice	-	Co(Bh) 4 seed	0.5 kg	1025	2.5 Kg	5125
T2	Co (Bh) – 4	TNAU 16	Arka Nikita seed	0.5 kg	1100	2.5 Kg	5500
T3	Arka Nikita	IIHR 17	Vegetable special	0.5 kg	87.50	2.5 Kg	440
			Field board	1	350	3	1050
TOTAL					**2562.5**		**12115**

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Team members	No. of trials	Parameters to be studied
6	Guava	• Low market price of L-49 fruits(Rs.15-20/kg) • Low consumer preference (50%) • Low income (75%) • Incidence of nematode (20%)	Assessment of yield and income potentials of Red flesh Guava varieties	SMS (Horti)	5	Yield per plant Yield /unit area BC ratio

Technology options		Source of Technology	Name of critical input	Qty per trial	Cost per trial	Total Qty	Total Cost (Rs.)
T1	Farmers Practice (L – 49)	-	Arkakiran layers	50 nos	3500	250 nos	17500
T2	Lalit	CISH, Lucknow 2000	Lalit layers	50 nos	3000	250 nos	15000
			L-49	50 nos	2500	250 nos	12500
T3	Arka Kiran	IIHR 2013	Field board	1	350	5	1750
TOTAL					**9350**		**46750***
	50% Contribution from Farmer beneficiaries						**23375**

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Team members	No. of trials	Parameters to be studied
7	Lemon	• Drudgery involved in Lemon fruit plucking (80%) • Little or no awareness on fruit harvester (90%) • Non availability of fruit harvesters in local stores (95%) • Damage to the branches and fruits	Assessment of the efficiency of Lemon fruit harvesters	SMS (Horti)	5	Efficiency: Kg/ hour Damage: % in branches and fruits Savings: in terms of time and labour Net profit

	Technology options		Source of Technology	Name of critical input	Qty per trial	Cost per trial	Total Qty	Total Cost (Rs.)
	T1	Farmer Practice	-	TNAU model	1no	600	5 no	3000
	T2	TNAU Model	TNAU 2016	IIHR model	1no	650	5 no	3250
	T3	IIHR Model	IIHR, 2005					
	TOTAL					**1250**		**6250**

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Team members	No. of Farmer	Parameters to be studied
8	Mobile App	• Conventional Technology transfer mechanism is not effective in catering the need of individual farmer on time. • Inconsistency in availing information • Dependency of farmer on numerous specialist to get information in decision making • Lack of awareness on e extension tools	Assessing the effectiveness of e-Extension Tools in terms of Knowledge Gain and Symbolic Adoption Behavior among the Banana Growers	SMS (AE)	60	Before and After Knowledge Symbolic adoption

	Technology options		Source of Technology	Name of critical input	Qty per Farmers	Cost per trial	Total Qty	Total Cost (Rs.)
	T1	Transfer of Banana cultivation technologies through traditional extension tools like news paper, radio, TV, leaflet, folder, etc.,	TNAU	Pre Assessment of farmers	60	500		500
	T2	Transfer of Banana cultivation technologies through Expert System	TNAU	Feedback Collection	60	500		500
	T3	Transfer of Banana cultivation technologies through agri-tech portal (http://agritech.tnau.ac.in/ta/horticulture/horticulture_fruits_banana_ta.html)	TNAU	Leaflets	60	500		500
	TOTAL					**1500**		**1500**

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Team members	No. of Farmer	Parameters to be studied
9	Mobile App	• Lack of awareness on market information • Availability of services and their source were not known to the farmers • Unavailability of Information when farmer need it	Assessing the Effectiveness of Different Mobile Apps in terms of Knowledge Gain on market information among Medium and large Farmers	SMS (AE)	60	Before and After Knowledge Symbolic adoption

	Technology options		Source of Technology	Name of critical input	Qty per Farmers	Cost per trial	Total Qty	Total Cost (Rs.)
	T1	Kisan Suvidha Mobile App	GOI	Pre Assessment of farmers	60	500		500
	T2	Uzhavan Mobile App	TN GOV	Feedback collection	60	500		500
	T3	IFFCO KISAN Mobile app	IFFCO					
	TOTAL					**1000**		**1000**

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Team members	No. of Trial	Parameters to be studied
10	Goat	• Development of resistance to commonly available acaricide dipping solutions (65%) • Mortality in kids due to tick and lice infestation (30%) • Low body weight gain in kids (25%)	Assessment of different herbal preparations alternative to chemicals for the control of ectoparasites in small ruminants	SMS (AS)	4	Reduction in Tick /lice population per square inch Body weight gain(kg) Livability (%) Measuring Anaemic status using famacha score BCR

	Technology options		Source of Technology	Name of critical input	Qty per Trial	Cost per trial	Total Qty	Total Cost (Rs.)
	T1	Farmer practice	TANUVAS	Acoruscalamus root powder	200g	500	800gm	2000
	T2	Alternate practice 1	TANUVAS 2011	Famacha score card	3	100	12 No	400
				Lemon essential oil	45ml	600	180ml	2400
	T3	Alternate practice 2	ITK	Field board	1	350	4 No	1400
	TOTAL					**1550**		**6200**

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Team members	No. of Trial	Parameters to be studied
11	Palmyra	High incidence of non communicable diseases	Alternative natural sweetener for snack products	SMS H. Sci., AE,	5	Shelf life, Sensory attributes & BCR

	Technology options		Source of Technology	Name of critical input	Qty per Trial	Cost per trial	Total Qty	Total Cost (Rs.)
	T1	Farmer practices (white sugar)	Centre for Post Harvest Technology, TNAU, 2017	Raw material and packing material	5	1000	5000	5000
	T2	palm sugar						
	T3	Jaggery	IIFPT, 2014					
	TOTAL							**5000**

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Team members	No. of Trial	Parameters to be studied
12	Paddy	• Lack of awareness on water saving device • Poor cultivation practices • Lack of awareness on irrigation system • Water scarcity • High methane emission • Surplus water use	Assessing the Irrigation system in Paddy	SMS Ag, FM	1	• No of hills / m^2, No of tiller /hill, • No. of seeds per panicle, • Irrigation water applied (mm) • WUE (kg ha mm-1) • No of irrigation • Yield / ha • BC ratio

	Technology options		Source of Technology	Name of critical input	Qty per Trial	Cost per trial	Total Qty	Total Cost (Rs.)
	T1	Smart water technique for rice	**IRRI-2017**	Co (R) 51/ TKM 13	20kg	400		400
				Drip irrigation	1	15000		15000
	T2	Drip irrigation – (16 mm at a spacing of 0.6 m)	TNAU	Micro Sprinkler	1	15000	1	15000
	T3	Micro sprinkler	TNAU	PaniPipes	10	2000		2000
				Field board	1	350		350
	TOTAL							**32750**

9. Abstract of FLDs proposed for the year 2019 - 20 (on order of priority)

Sl. No	Crop/ enterprise	Title	Village	Amount
1	Paddy	Demonstration of Paddy TKM (R) 13 with ICM Practices	TN Kulam	14000
2	Sorghum	Demonstration of ICMP in dual purpose Sorghum K - 12	Kumarapuram	9000
3	Cumbu	Demonstration of ICMP in Cumbu Co (C) -10	Kollanginaru	8000
4	Cotton	Demonstration on Integrated Pests Management of cotton	TN Kulam	11250
5	Green gram	Demonstration of IDPM in Green gram	Kumarapuram	10400
6	Bhendi	Demonstration on Integrated Pests and Diseases Management of Bhendi	TN Kulam	8310
7	Jasmine	Demonstration of Star Jasmine CO 1	TN kulam	23125
8	Radish	Demonstration of Arka Nishant Radish as an alternate crop for long duration crops in water stress areas	TN Kulam	10125
9	Bottle gourd	Demonstration of Bottle gourd PLR-2	TN Kulam	9750
10	Mixed green Fodder	Demonstration of Mixed Green fodder cultivation	Rajaputhukudi / Villiseri	11000
11	Dairy Calf	Demonstration on veterinary first aid kit to reduce calf mortality	Rajaputhukudi / Villiseri	6000
12	Poultry	Demonstration of TANUVAS Aseel chicken for backyard rearing	Rajaputhukudi / Kumarapuram	10000
13	Greens	Demonstration on production of nutri greens for nutritional security	Kumarapuram	8000
14	Machinery	Demonstration of vegetable transplanter	Rajaputhukudi	10000
15	Cattle	Demonstration Of Oestrus Synchronization Procedure To Enhance The Fertility Rate In Cows	Rajaputhukudi / Villesery	19600
Total				**168560**

10. Frontline Demonstrations during 2019 - 20

Sl. No	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Team members	Parameters to be studied
1	Cereals	Paddy	• Low level of awareness on high yielding new varieties (92%) • Susceptible to Bacterial leaf blight – Yield loss 30-40 % • low yield from the existing ruling Variety BPT 5204 (4350 kg/ha)	• ICMP in Paddy TKM (R) 13 (TNAU 2015) duration 130 days - Medium slender Y – 5.9 t/ha) • INM - Application of organic manures • Apply 12t of FYM or compost or green manure (Daincha)@ 50 kg seeds/ha • Bio fertilizer application • Application of inorganic fertilizers – NPK 150:50:50 • Application of zinc sulphate Apply 25 kg /ha • IWM - Pre-emergence herbicides - Butachlor 1.25kg/ha • IPDM Practices.	Variety	SMS (Ag, AE)	No of hill / m2 No of Productive tillers / hill No of seeds / panicle Yield/ha and BC ratio

Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	Total Qty	No. of Demo	Total cost for the Demo (Rs.)
TKM 13	TNAU 2015	Paddy TKM -13	20Kg	1000	200 Kg	**10**	10000
		Azophos	1kg	50	10 Kg		500
		Field Board	1 no	350	10 No		3500
		TOTAL		**1400**			**14000**

Sl. No	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Team members	Parameters to be studied
2	Cereals	Sorghum	• Low productivity in K-8 variety (990Kg/ha) • Crop losses in existing commercial hybrids due to drought condition in later stage of crop growth (50%) • High cost of Commercial hybrid seeds • Late maturing long duration commercial verities invites midges attack (55%)	• ICMP in Sorghum K – 12- 2015(duration 95 days) – Yield 3123 Kg/ha • Seed treatment – Azophos • N:P:K – 90: 45 :45 kg/ha. • Micronutrient mixture 12.5 kg /ha • IWM - Apply PE Atrazine @ 0.25 kg/ha on 3-5 DAS • IPDM Practices.	Variety	SMS (Ag, AE)	• Population /m^2 • No of seed /head • 100grain wt. Yield /ha • BC ratio

Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	Total Qty	No. of Demo	Total cost for the Demo (Rs.)
K – 12	TNAU 2015	Sorghum – K – 12	4kg	200	40 Kg	**10**	2000
		Azophos	1kg	50	10 Kg		500
		PPFM	1Lit	300	10 lit		3000
		Field Board	1 no	350	10 Nos		3500
		TOTAL		**900**			**9000**

Sl. No	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Team members	Parameters to be studied
3	Millets	Cumbu	• Low productivity in existing variety (890 Kg/ha) • Crop losses in existing commercial hybrids due to drought condition in later stage of crop growth (50%) • High cost of Commercial hybrid seeds (86%)	• ICMP in Cumbu Co – 10 - 2016 (Duration 85-90 days) – Yield 2925 Kg/ha, • Seed treatment – Azophos • N:P:K – 70:35:43 kg/ha. • Micronutrient mixture 12.5 kg /ha • IWM - Apply PE Atrazine @ 0.25 kg/ha on 3-5 DAS • IPDM Practices.	Variety	SMS (Ag, AE)	• Population /m^2 • No of seed /head • 100grain wt. • Yield /ha • BC ratio

Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	Total Qty	No. of Demo	Total cost for the Demo (Rs.)
Co – 10	TNAU 2016	Cumbu Co-10	2kg	100	20 Kg	**10**	1000
		Azophos	1kg	50	10 Kg		500
		PPFM	1Lit	300	10 lit		3000
		Field Board	1 no	350	10 Nos		3500
		TOTAL		**800**			**8000**

Sl. No	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Team members	Parameters to be studied
4	Fiber crop	Cotton	• Incidence of whitefly, leafhopper and stem weevil infestation resulted yield loss of up to 40% • Over use of insecticides and Lack of awareness about IPM	• Basal application of 250 kg/ha of neem cake. • Installation -Yellow sticky @ 12/ha 20 DAS • Drenching collar region with chlorpyriphos 20 EC @ 2.5ml/ l on 15 and 30 DAS • Foliar spray of Verticilliumlecanii 1.15%WP @ 5g/litre 35	Variety	SMS (PP, Ag)	• Percentage of pest incidence • Percent Reduction in damage • Yield / ha and • B.C Ratio

				DAS • Fish oil resin shop 25g/litrecotrol mealy bug 45 DAS • Foliar spray - Thiomethoxam @ 0.4 g/ lit 60 das				
	Name of the Hybrid or Variety	**Source of Technology**	**Name of critical input**	**Qty per Demo**	**Cost per Demo**	**Total Qty**	**No. of Demo**	**Total cost for the Demo (Rs.)**
		TNAU	Yellow sticky trap	5 no	275	50 Nos	**10**	2750
			Verticillium lecanii 1.15%WP	1 kg	500	10 Kg		5000
			Field Board	1 no	350	10 No		3500
			TOTAL		**1125**			**11250**

Sl. No	**Category**	**Crop/ enterprise**	**Prioritized problem**	**Technology to be demonstrated**	**Specify Hybrid or Variety**	**Team members**	**Parameters to be studied**
5	Pulses	Green gram	• Incidence of pod borer and powdery mildew infestation resulted yield loss of up to 35 per cent	• Pheromone traps for *Helicoverpaarmigera* 1 2/ha • Neem oil 5ml/lit 30 DAS • B.t. 600g/ac 40 DAS	Variety	SMS (PP, Ag)	• Percentage of pest incidence • Percent Reduction in damage • Yield / ha and • B.C Ratio

Name of the Hybrid or Variety	**Source of Technology**	**Name of critical input**	**Qty per Demo**	**Cost per Demo**	**Total Qty**	**No. of Demo**	**Total cost for the Demo (Rs.)**
	TNAU	Bt	600 gm	90	6 Kg	**10**	900
		Pheromone trap	5 no	600	50 No		6000
		Field Board	1 no	350	10 No		3500
		TOTAL		**1040**			**10400**

Sl. No	**Category**	**Crop/ enterprise**	**Prioritized problem**	**Technology to be demonstrated**	**Specify Hybrid or Variety**	**Team members**	**Parameters to be studied**
6	Vegetables	Bhendi	• Incidence of Shoot and Fruit borer and leaf spot infestation resulted yield loss of upto4 0 per cent • Lack of awareness on IDPM	• Set up pheromone trap @ 12/ha. • Application Pseudomonas fluorescens 1kg/ac • Neem oil 5ml/lit spray • Spray *Bacillus thuringiensis* @ 2 g/lit or spray • Spray Emamectin benzoate 5% SG @ 0.5g/litre	Variety	SMS (PP, Hort)	• Percentage of pest incidence • Percent Reduction in damage • No. of shoot and fruit borer adults trapped/ trap, • Yield / ha • B.C Ratio

Name of the Hybrid or Variety	**Source of Technology**	**Name of critical input**	**Qty per Demo**	**Cost per Demo**	**Total Qty**	**No. of Demo**	**Total cost for the Demo (Rs.)**
	TNAU	Pseudomonas fluorescens	1 kg	120	6 Kg	**6**	720
		Pheromone trap	10 Nos	1000	60 No		6000
		Bt	600 g	90	3.6 Kg		540
		Field Board	1 no	350	3 No		1050
		TOTAL		**1560**			**8310**

Sl. No	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Team members	Parameters to be studied
7	Flower	Jasmine	• Low –nil production during Nov- Feb in J.sambac • Lesser market price during peak production period • No Known varieties with off season production capabilities • Little awareness on Improved / new varieties	• Cultivation of Star Jasmine with ICM practices Star Jasmine 1 (TNAU- 2019)	Variety	SMS (Horti)	• Yield per plant • Yield/ha • Income/ha • BCR

Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	Total Qty	No. of Demo	Total cost for the Demo (Rs.)
Co – 1	TNAU 2019	Star jasmine cuttings	300nos	3900	3000	5	19500
		Nutrient consortium (ZnSO4 + FeSo4)	0.75kg	175	7.5 Kg		875
		EM/Panchakavya	1lit	200	10 lit		1000
		Field board	1	350	10 No		1750
		TOTAL		**4625**			**23125**

Sl. No	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Team members	Parameters to be studied
8	Vegetable	Radish	• Little awareness on alternate crops for quick yield and income (80%) • Flower and fruit drop in lond duration crops due to water stress • Low income	• Cultivation of ArkaNishant with ICM practices IIHR -2005	Variety	SMS (Horti)	• duration of the crop • Yield/ha • Income/ha • BC ratio

Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	Total Qty	No. of Demo	Total cost for the Demo (Rs.)
	IIHR 2005	Arkanishant seeds	2kg	1300	20 Kg	5	6500
		Vegetable special	1kg	175	10 Kg		875
		EM/Panchakavya	1lit	200	10 lit		1000
		Field board	1	350	10 No		1750
		TOTAL		**2025**			**10125**

Sl. No	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Team members	Parameters to be studied
9	Vegetable	Bottle gourd	• High cost of pandal erection (Rs.47600/ac) • Fruit fly and powdery and downy mildew attack (80%) • Little awareness on resistant varieties	• Cultivation of PLR 2 with ICM practices PLR (BG)2 TNAU,-2019	Variety	SMS (Horti)	• Incidence of Powdery and downy mildew • Incidence of fruit fly • Yield/ha • Income/ha • BCR

Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	Total Qty	No. of Demo	Total cost for the Demo (Rs.)
	TNAU 2019	PLR (BG) seeds	0.5kg	750	5 Kg	6	4500
		Vegetable special	1kg	175	10 Kg		1050
		EM/Panchakavya	1lit	200	10 lit		1200
		Azophos	2kg	150	20 Kg		900
		Field board	1	350	10 No		2100
		TOTAL		**1625**			**9750**

Sl. No	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Team members	Parameters to be studied
10	Fodder	Fodder	• Lack of green fodder feeding during dry season • Under performance of cross breed milch cows (milk yield 6.5lit/day, Milk SNF-7.7 , Fat- 3.9%, TS-11.6 and the avg rate for milk – 24.47/lit • Lower net profit/unit due to poor feeding practices (98%)	Mixed green fodder cultivation (CO (CN) - 5, Hedge lucerne/Sesbania, Fodder sorghum CSV-33	Variety	SMS (AS)	• Yield per ha • Palatability index • BCR

Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	Total Qty	No. of Demo	Total cost for the Demo (Rs.)
	TNAU 2017	Fodder sets Co(CN)-5	1600 set	1600	16000 set	**5**	8000
		Hedgelucerne / sesbania seeds	250g	150	2.5 Kg		750
		Fodder sorghum CSV-33	250g	100	2.5 Kg		500
		Field board	1	350	10 No		1750
		TOTAL		**2200**			**11000**

Sl. No	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Team members	Parameters to be studied
11	Animal	Dairy Calf	• Lack of knowledge on neonatal management and mortality in calves (50%) • Poor calf growth rate (30%)	• Demonstration on veterinary first aid kit • Calf rearing practice	Variety	SMS (AS)	• Calf birth weight (Kg) • Calf growth rate/ body weight gain • Mortality % • B.C. Ratio

Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	Total Qty	No. of Demo	Total cost for the Demo (Rs.)
	TANUVAS 2018	Veterinary first aid kit (Calf kit, Dewormer, anti-bloat, ectoparasiticides, antipyretic, antibiotics, wound healer)	1 set	300	20 set	**20**	6000
		TOTAL		**300**			**6000**

Sl. No	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Team members	Parameters to be studied
12	Animal	Poultry	• Low income (65%) • Low body weight gain (20%), • Low egg production (20%) • Less preference for cross bred chickens	**Body weight** 8th week – 440g At sexual maturity–1004gm **Egg weight** 28th Week – 52.14gm **Egg production** Annual egg number–160No Total hatchability – 70.75% Fertile hatchability– 85.17% Adult livability – 98%	Variety	SMS (AS)	• Body weight gain (g) • Feed intake (g), FCR, • Livability (%) • Egg yield per annum • B. C. Ratio

Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	Total Qty	No. of Demo	Total cost for the Demo (Rs.)
Aseel	TANUVAS 2017	30 days old TANUVAS Aseel chicken	10	1000	100	**10**	10000
		TOTAL		**1000**			**10000**

Sl. No	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Team members	Parameters to be studied
13	Greens	Fenugreek, coriander, mint, amaranthus, mustard	• Low per capita consumption of greens. • Incidence of micro nutrient deficiency	Demonstration on production of nutri greens for nutritional security	Local variety	SMS (HS,AE & Horti)	Time taken / efficiency of harvesting

Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	Total Qty	No. of Demo	Total cost for the Demo (Rs.)
	CSC & RI, TNAU, Madurai	Green leafy vegetables seeds	5	100	25	**5**	8000
		Grow bag	5	1500	25		
		Total		**1600**			**8000**

Sl. No	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Team members	Parameters to be studied
14	Farm mechanization	Vegetable	• Labour intensive • Lower planting efficiency • Drudgery in manual planting	Demonstration of vegetable transplanter	Hybrid	SMS Hom. Sci, Horti,	Seedling efficiency, labour cost & heart rate

Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	Total Qty	No. of Demo	Total cost for the Demo (Rs.)
	Dept. of FRM, CSC & RI, Madurai, 2018	Vegetable seedling transplanter	1	2000	5	**5**	10000
		Total					**10000**

Sl. No	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Team members	Parameters to be studied
15	Animal	Cattle	• Delayed inseminations (60%), • Repeat breeding (20%), • Infertility (20%)	Oestrus synchronization and Artificial insemination using Nanopatch Prosynch NC protocol (TANUVAS 2017)		SMS AS	Efficiency in estrus synchronization (%) No. of inseminations required for successful fertilization B. C. Ratio

Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	Total Qty	No. of Demo	Total cost for the Demo (Rs.)
	TANUVAS 2017	Prosynch NC	2	780	40	**20**	15600
		Common Field board	1	2000	2		4000
		Total		**2780**			**19600**

11. Integrated Farming System

Thematic area	Integrated Farming System (IFS)
Budget proposed in Rs.	30800
Technology to be demonstrated	• Rearing improved desi chicken like Gramapriya/ Cauvery/ TANUVAS Aseel • Honey bee rearing • Azolla cultivation for livestock and poultry feeding • Recycling crop residues through Waste Decomposer
Village identified	Kollanginaru, TN kulam
Number of farmers to be enrolled	5

Budget for IFS

S. No	Details	Unit cost	Amount
1	Silpaulin sheet , shade net and Azolla inoculums	Rs. 600 X 5 Demo	3000
2	Improved backyard poultry chicks	Rs. 1000 X 5 Demo	5000
3	Honey bee boxes with hives	Rs. 2500 X 5 Demo	22550
4	Waste Decomposer	Rs. 50 X 5 Demo	250
	TOTAL		**30800**

Details of farming system practices with IFS farmers identified for interventions

Village	Farming practices available	Possible proposed Inclusions
TN Kulam	Cropping pattern Garden land – Paddy/ Vegetable/Flower – Cotton Livestock - Cattle , Goat, backyard poultry Composting by open yard method	Azolla cultivation Panchakavya and organic Pest repellent preparation Improved backyard poultry rearing Honey bee keeping Waste Decomposer
Kollanginaru	Cropping pattern Garden land - Vegetable/Flower – Cotton Dry land - Black gram/green gram/ cotton/ Sorghum Livestock – cattle, goat , Backyard poultry Composting by open yard method	Improved backyard poultry rearing Azolla cultivation Honey bee keeping Panchakavya and organic Pest repellent preparation Waste Decomposer

12. Entrepreneurship Development Program (EDP)

No.	**1**
Title of the Program	**Promotion of Onion Products**
Budget proposed in Rs.	55000
Prioritized problem	• Poor remunerative returns to the farmers during glut season • Minimum level of awareness on value addition • Low level of understanding on its nutritive value • Poor shelf life for fresh onion
Technology to be demonstrated	• Demonstration of onion products • Demonstration and standardization of value added products from onion Eg. Onion pickle, Onion paste, Vadagam • Labeling, attractive packing and marketing through Farmer Producer Company Limited
Village identified	Vilathikulam
Number of farmers	10
Parameters to be observed	Recovery %, Shelf life, Consumer preference, Income/head, BCR
Team members	SMS (HS), SMS (Hort)

Budget for EDP – 1

S. No	Details	Unit cost	Amount
1	Onion peeler machine	54650	54650
2	Field board	350	350
	TOTAL		**55000**

13. Training for Farmers/ Farm Women during 2019 - 20

Sl No	Thematic area	Crop/ Enterprise	Major problem	Linked field intervention (Assessment/ Refinement/ FLD)*	Training Course Title**	No. of Courses	Expected No. of participants	Names of the team members involved
1	Horticulture	Vegetables	Low productivity, Pest and disease, water scarcity	Training	Protected cultivation with Precision farming techniques	2	40	SMS(Hort)
2	Horticulture	Guava	Low productivity due low plant population	FLD	High density planting techniques	2	40	SMS(Hort)
3	Horticulture	Banana	Low productivity due low plant population	FLD	High density planting techniques	2	40	SMS(Hort)
4	Horticulture	Chilli	Low productivity of local varieties	FLD	High yielding Chilli Hybrids	2	40	SMS(Hort, Agr, PP)
5	Home science	Palmyra	Lower income to Palmyrah growers, High incidence of non communicable diseases	OFT	Value addition on Palmyrah products	2	40	SMS(H.Sc)
6	Home science	Onion	Poor remunerative returns to the farmers during glut season Minimum level of awareness on value addition Low level of understanding on its nutritive value	EDP	Value addition on onion	2	40	SMS(H.Sc)
7	Home science	Lemon	Drudgery involved in Lemon fruit plucking(80%) Little or no awareness on fruit harvester(90%) Non availability of fruit harvesters in local stores(95%) Damage to the branches and fruits	OFT	Demonstration and usage of lemon plucker	2	40	SMS(H.Sc)
8	Home science	Greens	low per capita consumption of greens. Incidence of micro nutrient deficiency	FLD	Training on importance of nutri green garden for nutritional security	2	40	SMS(H.Sc)
9	Home science	Vegetable	Labour intensive Lower planting efficiency Drudgery in manual planting	FLD	Demonstration and usage of vegetable seedling transplanter	2	40	SMS(H.Sc)
10	Plant Protection	Maize	High incidence of FAW (>80%) AND Poor yield Lack of awareness on IPM practices	OFT	Management Practices to Control the FAW infestation in Maize	2	40	SMS (PP)
11	Plant Protection	Cotton	Over use of insecticides and Lack of awareness about IPM	FLD	Integrated Pests Management of cotton	2	40	SMS (PP)
12	Plant Protection	Green gram	Incidence of pod borer and powdery mildew infestation resulted yield loss of up to 35 per cent	FLD	IDPM in Green gram	2	40	SMS (PP)
13	Plant Protection	Black gram	Incidence of pod borer and powdery mildew infestation resulted yield loss of up to 35 per cent	FLD	IDPM in Black gram	2	40	SMS (PP)
14	Plant	Bhendi	Lack of awareness on	FLD	Integrated Pests and	2	40	SMS (PP)

	Protection		IDPM		Diseases Management of Bhendi			
15	Agronomy	Sorghum	Low productivity of traditional varieties	FLD	ICM for Sorghum K12	2	40	SMS(Agr)
16	Agronomy	Cumbu	Low productivity of traditional varieties	FLD	ICM for Cumbu Co 10	2	40	SMS(Agr)
17	Agronomy	Paddy	Low productivity of traditional varieties	FLD	ICM for TKM-13 Paddy	2	40	SMS(Agr)
18	Agronomy	Maize	Low productivity of traditional varieties	FLD	ICM for Co (MH) 6	2	40	SMS(Agr)
19	Agronomy	Black gram	Low productivity of traditional varieties	FLD	ICM for VBN 8 variety	2	40	SMS(Agr)
20	Agronomy	Green gram	Low productivity of traditional varieties	FLD	ICM for Co(Gg) 8 variety	2	40	SMS(Agr)
21	Agronomy	Groundnut	Low productivity of traditional varieties	FLD	ICM for Co(Gn) 6 variety	2	40	SMS(Agr)
22	Agronomy	Sun Flower	Low productivity of traditional varieties	FLD	ICM for Co(SFSH)-6 variety	2	40	SMS(Agr)
23	Livestock Production	Backyard poultry rearing	Poor productivity of the desi birds, mortality in birds	Extension activities, Vet. Camp	Improved backyard poultry rearing	6	120	SMS AS
24	Livestock Production	IFS	Reduced profitability and lack of employment due to non-adoption of IFS	IFS	Integrating livestock with crop and residue recycling	2	40	SMS AS SMS AG
25	Livestock Production	Cattle	High production cost , production loss due to mastitis , production and infectious diseases, infertility due to poor breeding and feeding practices	FLD,	Profitable dairy farming practices	2	40	SMS AS
26	Livestock Production	Fodder	Non availability of green fodder	FLD	Green fodder cultivation & Preservation	1	20	SMS AS SMs Ag
27	Livestock Production	Goat & Sheep	Mortality in Sheep and goats due to infectious diseases and parasitism	FLD, Vet. Camp	Feeding and disease management in sheep and goats	2	40	SMS AS
28	Extension	Extension tools	Personal contact with every farmer is difficult	OFT	Banana expert system	2	40	SMS (AE)
29	Extension	Mobile apps	Inconsistency in availing advisory services	OFT	Mobile based Apps in farming for tech savvy farmers	2	40	SMS (AE)
30	Extension	Waste decomposing	Improper waste utilization and Low Soil fertility	Training and Extension activities	Waste is wealth – waste management	2	40	SMS (AE)
31	Extension	e Market Linkage	Middle man intervention and low knowledge on marketing network	Training and Extension activities	e market linkage for small and marginal farmers	2	40	SMS (AE)
TOTAL						**65**	**1300**	

14. Training for Rural Youth during 2019 - 20

Sl. No	Thematic area	Crop / Enterprise	Major problem	Linked field intervention (Assessment/ Refinement/ FLD)	Training Course Title	No. of Courses	Expected No. of participants	Names of the team members involved
1	Horticulture	Poly house	Low production, pest and disease and low quality products	Nil	Poly house cultivation for high value commercial horticulture crops	1	20	SMS Hort, PP
2	Horticulture	Hydroponics	Un employment and under employment	Nil	Hydroponics farming for vegetable cultivation	1	20	SMS Hort, PP
3	Home science	Onion	Little awareness on value addition and	Training/FLD	Value addition and marketing strategies	2	40	SMS H.Sc

			marketing					
4	Home science	Greens	Low per capital consumption of greens. Incidence of micro nutrient deficiency	FLD	Training on importance of nutrition garden	2	40	SMS HS, Hort, PP
5	Livestock production	Dairy cow	Less profitability and drudgery in dairy farming	FLD	Dairy farming as an entrepreneurial venture for rural youth	3	60	SMS AS, Ag, AE
6	Livestock Production	Sheep and Goat rearing	Low productivity	OFT	Sheep and goat rearing as an entrepreneurial venture for rural youth	3	60	SMS AS, Ag, AE
7	Livestock Production	poultry	low productivity, predator and disease as cause of mortality	FLD	Alternative poultry rearing as an entrepreneurial venture for rural youth	3	300	SMS AS, Ag, AE
8	Agronomy	All Crops	High cost of pesticide	FLD	Panchakavya and Poochivirati Production	1	20	SMS PP, Ag
9	Agronomy	Mushroom	Non availability of crops	Nil	Spawn, Mushroom Production methods	1	20	SMS PP, HS
10	Agronomy	Seed production techniques	Non availability and less awareness	Nil	Seed production in cereals, millets and pulses	1	20	SMS Ag, PP, AE
11	Agronomy	All crops	Lack of awareness about soil moisture conservation	OFT	Composting technology and soil moisture conservation	1	20	SMS Ag
12	IFS	IFS	Low productivity of the farm	FLD	Integrated Farming system modes for different farming situation	2	50	All Staff
13	Horticulture	Coconut	Low productivity	Nil	Coconut tree climbing using devise and tree management	3	90	All Staff
TOTAL						**24**	**760**	

15. Trainings for Extension Personnel during 2019 - 20

Sl No	Thematic area	Training Course Title	No. of Courses	Expected No. of participants	Names of the team members involved
1	Crop production	Contemporary technologies for increasing productivity in field crops	1	30	SMS (Ag, PP, AE)
2	Waste to wealth	Advanced technologies in farm waste recycling	1	30	SMS (Ag)&(Horti) SMS (AS)
3	Seed production	Seed production techniques for Solanaceous vegetables	1	20	SMS (Hort, PP)
4	Organic farming	Organic farming practices for horticulture crops	1	20	All Staff
5	Dry land farming	Fruit trees for dry land farming	1	20	SMS (Hort, PP)
6	Precision farming	Precision farming techniques for commercial horticulture crops	1	20	SMS (Hort, PP, AE)
7	Home Science	Value addition on Moringa products	1	20	SMS (H.Sc, AE)
8	Home Science	Value addition on minor millets	1	20	SMS (H.Sc, AE)
9	Home science	Training on importance of nutrition garden	1	20	SMS (H.Sc, Hort)
10	Livestock Production, Management	Recent advances in dairy cattle management practices for profitable dairy	1	20	SMS AS, Ag
11	Livestock Production, Management	Drought period and Summer management in livestock and poultry	1	20	SMS AS, Ag
TOTAL			**11**	**240**	

16. Vocational trainings during 2019 - 20

Sl No	Thematic area and the Crop/Enterprise	Training title*	No. of programmes and Duration (days)	Type of Clientele (SHGs, NYKs, School students, Women, Youth etc.)	Expected No. of participants	Sponsoring agency if any	Names of the team members involved
1	Horticulture	Production of high value horticulture crops under protected structures	1 (3 days)	Farmers &Extn.Personals	30	NABARD	SMS(Hort)
2	Horticulture	Hydroponics & vertical farming techniques for vegetable production	1 (3 days)	Farmers & Extn. Personals	30	NABARD	SMS(Hort) SMS (Ag) SMS (H.Sc)
3	Home Science	Value addition on onion products	1 (3 days)	Youth & women	30	NABARD	SMS H.S
4	Home Science	Value addition on fruits	1 (3 days)	Youth & women	30	NABARD	SMS H.S
5	Oyster Mushroom Cultivation	Oyster Mushroom Cultivation and Value addition	5 (3 days)	Youth & women	30	NABARD	SMS H.S
6	Coconut tree management	Coconut tree climbing using devise and tree management	200 hrs (3 Batches)	Farmer's & Youth	60	Coconut development board	SMS Ag SMS Hort
7	IFS	Livestock integration in cropping system (IFS)	1 (5 days)	Farmer's & Youth	20	-	SMS AS SMS Ag SMS H.Sc
9	Livestock production	Recent advances in dairy cattle management	1 (3 days)	Farmer's & Youth	30	NABARD	SMS AS SMS Ag SMS H.Sc
10	Poultry production	Scientific practices for rearing improved chickens in backyards	1 (3 days)	Farmer's & Youth	30	NABARD	SMS AS SMS H.Sc
11	Livestock production	Sheep and goat rearing	1 (3 days)	Farmer's & Youth	30	NABARD	SMS AS SMS H.Sc
TOTAL			**16**		**320**		

17. Sponsored trainings during 2019 - 20

Sl No	Thematic area and the Crop/Enterprise	Training title*	No. of programmes/ Duration (days)	Type of Clientele	Expected No. of participants	Sponsoring agency	Names of the team members involved
1	Horticulture	Production of high value horticulture crops under protected structures	1 (3 days)	Farmers &Extn. Personals	30	NABARD	SMS (Hort, PP)
2	Horticulture	High density planting techniques for fruit crops	1 (3 days)	Farmers &Extn. Personals	30	NABARD	SMS (Hort, PP)
3	Horticulture	Hydroponics & vertical farming techniques for vegetable production	1 (3 days)	Farmers &Extn. Personals	30	NABARD	SMS (Hort) SMS (Ag) SMS (H.sc)
4	Home Science	Value addition on onion products	1 (3 days)	Youth & women	30	NABARD	SMS H.S, AE
5	Coconut tree management	Coconut tree climbing using device and tree management	200 hrs (3 program)	Farmer's & Youth	60	Coconut development board	All Staff
6	Dairy cattle	Recent advances in dairy cattle management	1 (3 days)	Farmers and farm women	30	NABARD	SMS AS SMS Ag SMS AE
7	Poultry production	Scientific practices for rearing improved chickens in backyards	1 (3 days)	Farmers and farm women	30	NABARD	SMS AS SMS Ag SMS AE
8	Goat rearing	Technologies for Profitable goat rearing	1 (3 days)	Farmers and farm women	30	NABARD	SMS AS SMS Ag SMS AE
TOTAL			**10/ 39days**		**270**		

18. Extension programmes during 2019 - 20

Sl. No	Extension programme*	No. of programmes or activities	Expected No. of participants	Names of the team members involved
15.1	Advisory Services	325	165000	ALL SMS
15.2	Diagnostic visits	85	580	ALL SMS
15.3	Field Day	15	350	ALL SMS
15.4	Group discussions	25	400	ALL SMS
15.5	Kisan Ghosthi	1	200	ALL SMS
15.6	Film Show	5	1000	ALL SMS
15.7	Joint Liability Group	200	1000	ALL SMS
15.8	Kisan Mela	1	500	ALL SMS
15.9	Exhibition	8	570	ALL SMS
15.10	Scientists' visit to farmers field	212	1900	ALL SMS
15.11	Plant/Soil health campaign	8	200	ALL SMS
15.12	Farm Science Club	20	400	ALL SMS
15.13	Ex-trainees Sammelan	2	100	ALL SMS
15.14	Farmers' seminar/workshop	3	180	ALL SMS
15.15	Method Demonstrations	30	300	ALL SMS
15.16	Celebration of important days	4	800	ALL SMS
15.17	Exposure visits	6	240	ALL SMS
15.18	Technology week,	1	750	ALL SMS
15.19	Farm innovators meet	1	100	ALL SMS
15.20	Awareness programs	10	200	ALL SMS
15.21	Farmers meeting	20	400	ALL SMS
15.22	WSHG Meetings	20	400	ALL SMS
15.23	PRA	5	120	ALL SMS
15.24	Farmer Producer Organization	6	3000	ALL SMS
15.25	Animal health campaign	20	2000	ALL SMS
15.26	Swatch barath programme	5	500	ALL SMS
15.27	Jai Kissan Jai Vigyan celebration	5	500	ALL SMS
TOTAL		**1043**	**181690**	

19. Activities proposed as Knowledge and Resource Centre during 2019 – 20

19.1. Technological knowledge

Sl. No	Category	Details of technologies	Area (ha)/ Number	Names of the team members involved
19.1.1	Technology Park/ Crop cafeteria	Nursery for fruit and ornamental seedlings production	1 ha	Farm manager, SMS Hort, SMS Ag
		Banana	0.4 ha	Farm manager, SMS Hort, SMS Ag
		Mango	1 ha	Farm manager, SMS Hort, SMS Ag
		Coconut(TXD)	3 ha	Farm manager, SMS Hort, SMS Ag
		Coconut (Tall)	0.8ha	Farm manager, SMS Hort, SMS Ag
		Sapota	0.4 ha	Farm manager, SMS Hort, SMS Ag
		Drumstick	0.4 ha	Farm manager, SMS Hort, SMS Ag
		Casuarina	0.4 ha	Farm manager, SMS Hort, SMS Ag
		Green fodder (CO-4), CoFS-29,30, Subabul	0.4 ha	Farm manager, SMS Hort, SMS Ag
		High density planting with mango and guava	0.2 ha	Farm manager, SMS Hort, SMS Ag
19.1.2	Demonstration Units	Vermicompost unit	45 sq.m	SMS Ag, Prog. Asst
		Mushroom unit	45 sq.m	SMS HS, Prog. Asst
		Stunted Fish rearing unit	3 unit (360sqm)	Farm Manager, SMS AS
		Fish rearing in farm pond	2 unit (700 sqm)	Farm Manager, SMS AS
		Ornamental fish breeding unit	1	Farm Manager, SMS AS
		Azolla unit	8 sq,m	Farm Manager, SMS AS
		Poultry chick brooding unit	160 sq.m	Farm Manager, SMS AS
		Heifer calf rearing unit	5	Farm Manager, SMS AS
		Poultry hatchery	120 and 240 egg capacity	Farm Manager, SMS AS
19.1.3	Lab Analytical services	Soil and water test lab	650 samples	SMS Ag, Prog. Asst
		Bio tech lab	1000 kg of biofertilizer	SMS Ag, Prog. Asst

19.1.4	Technology Week	Suitability of high yielding varieties for vegetables, high density planting for fruit crops, poly house cultivation, fodder production, backyard poultry, goat and sheep rearing, soil and water conservation, farm machineries and implements, soil sampling, value addition of fruit & vegetables	2 days	ALL SMS

19.2Technological Products

Sl. No	Category	Name of the product	Quantity (Qtl.)/Number planned to be produced during 2019 - 20	Names of the team members involved
19.2.1	Seeds	Paddy Seed –TKM -13	80 qtl	SMS Ag and FM
		Sorghum K-12	10 qtl	SMS Ag and FM
		Cumbu Co -10	10 qtl	SMS Ag and FM
		BlackgramVBN(Bg)-6	10 qtl	SMS Ag and FM
		Greengram Co-8(GG)	10 qtl	SMS Ag and FM
		Co (Fs)29,31	2.5 qtl	SMS Ag and FM
		Daincha seeds	3qtl	SMS Ag and FM
		Co-14 Lab lab seeds	1 qtl	SMS Hort and FM
		MDU-1 cluster bean seeds	1.5 qtl	SMS Hort, SMS HS. and FM
19.2.2	Planting materials	Mango, Guava graft plants	3000 numbers	SMS Hort and FM
		Subabul	0.1 qtl	SMS Hort and FM
		Gliricidia	1000 numbers	SMS Hort, and FM
		Jasmine seedlings	1000 numbers	SMS Hort, and FM
		Ornamental cuttings	10000 numbers	SMS Hort, and FM
		CO(CN)-4	20000 numbers	SMS AS and Ag, FM
19.2.3	Bio-products	Azophos	3.0 qtl	SMS Ag & PP, Lab Technician
		Rhizophos	2.5 qtl	SMS Ag & PP, Lab Technician
		T.viridi	3.0 qtl	SMS PP, Lab Technician
		Pseudomonas fluorescence	5.5 qtl	SMS PP, Lab Technician
		Mushroom	3 qtl	SMS PP, Lab Technician
		Salt lick	2.4qtl	SMS AS, Lab tech.
	Organic Inputs	Vermicompost	40 qtl	SMS Ag & PP, Lab Technician
		Waste Decomposer	240 no’s	SMS Ag & PP, Lab Technician
		Panchakavya	800 litre	SMS Ag & PP, F.M
		EM production	2000 lit	SMS Ag & PP, Lab Technician
		Fish oil	240 litre	SMS Ag & PP, Lab Technician
	Plant Protection	Insect repellent	600 litre	SMS PP, F.M
		Yellow & Blue sticky trap	200 nos	SMS PP, Lab Technician
		Pheromone trap	200 nos	SMS PP, Lab Technician
		Beekeeping kit	25 nos	SMS PP, Lab Technician
19.2.4	Livestock strains	Improved chicks	5000nos	SMS AS, FM
19.2.5	Technology Hand Books	Organic Input production manual	1000nos	SMS AE, Agr, FM
19.2.6	Home science	Vegetable mini seed kits	1500 nos	SMS(H.sc, Hort, AE)
		Roof garden kits	200	SMS(H.sc, Hort, AE)

19.3 Technological Information

Sl. No	Category	Technological capsules / Number	Names of the team members involved
19.3.1	Technology backstopping to line departments		
	Agriculture	4	SMS Ag
	Horticulture	4	SMS Horti
	Animal Husbandry	04	SMS AS
	Home science	02	SMS HS
19.3.2	Literature/publication	12	All SMS
19.3.4	Electronic Media	5	ALL SMS
19.3.5	Kisan Mobile Advisory Services	120	Comp Prog, SMS AS, HS, Ag, Hort
19.3.6	Information on centre/state sector schemes and service providers in the district.	Data may be collected from different agencies. Also indicate time of completion. (July 2019)	Comp Prog, SMS AS, HS, Ag, Hort

Additional Activities Planned during 2019 - 20

Sl. No	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
20.1	NABARD	Seminar on sustaining livelihood of Drought prone area farmers	2 days training 200 extension functionaries	100000	SMS Animal Science SMS Horticulture SMS Home Science
20.2	NABARD	Promotion of FPO	3 FPO, 500 farmers per FPO	2700000 for 3 years	All SMS
20.3	NABARD	JLG Formation	500 groups	1000000 for 2 years	SMS Home Science
20.4	NABARD	Promotion of Rural mart	2	400000	SMS AE, HS
20.5	NABARD	Value addition for Prosophis juliflora pyroligneous acid	Assessment of Prosophis juliflora pyroligneous acid as growth promoters and pest repellant	1300000	SMS PP, Ag, AE

20. Revolving Fund

21.1Financial status

Opening balance as on 01.04.2018 (Rs. in Lakh)	Expenditure incurred during 2018 – 19 (Rs. in Lakh)	Receipts during 2018 – 19 (Rs. in Lakh)	Closing balance as on 31.03.2019 (Rs. in Lakh)	closing balance by 31.03.2019(Including value of material in stock)
7.63	**17.24**	**15.84**	**9.03**	**13.46**

21.2 Plan of activities under Revolving Fund

S.No.	Proposed activities	Expected output	Anticipated income (Rs.)	Anticipated net income in Rs.	Names of the team members involved
1	Poultry chick rearing	5000	500000	73500	SS&H i/c& FM
2	Salt lick	240 Kg	18000	7000	SS&H i/c & Lab.Tech
3	Calf rearing	8 numbers	240000	40000	SS&H i/c & FM
4	Rural veterinary campaign	2000 animals	30000	10000	SS&H i/c
5	Paid training programmes	240	24000	24000	SS&H i/c
6	Project report preparation	25 farmers	5000	5000	SS&H i/c
7	Fodder seed sales under PPP	5 qtl	200000	25000	SS&H i/c
	Sub total			**227500**	
8	Nutrimix production under PPP mode	5000	20000	15000	SMS (HS)
9	Vegetable seed kit pack	1500 Nos	15000	10000	SMS (HS)
10	Roof garden kit sales	200 kits	5000	5000	SMS (HS)
11	Paid training programme	50 persons	7500	7500	SMS (HS)
	Sub Total			**53000**	
13	Trichodermo Viridi	300 Kg	24000	5000	SMS Ag & PP, Lab.Tech
	Pseudomonas fluorescence	550 kg	60000	15000	SMS Ag & PP, Lab.Tech

14	Azophos	300 kg	24000	7200	SMS Ag & PP, Lab.Tech
	Rhiozophos	250 kg	20000	6000	SMS Ag & PP, Lab.Tech
15	EM production	2000 lit	300000	60000	SMS Ag & PP, Lab.Tech
16	Mushroom production	300 kg	45000	22500	SMS Ag & PP,
17	Insect repellent	600 litre	39000	18000	SMS Ag & PP, F.M
	Yellow & Blue sticky trap	200 no	11000	2750	SMS PP, Lab Technician
	Pheromone trap	200 no	8000	2000	SMS PP, Lab.Tech
	Beekeeping kit	25	18000	4500	SMS PP, Lab.Tech
	Paid training programmes	40 persons	13500	135000	SMS (PP) & Lab. Tech
	Sub Total			**780450**	
	Fruit Crops seedling production under PPP mode	4000 no's	140000	40000	SMS (Hort) & F.M
	Vegetables & greens	0.5ac	30000	5000	SMS (Hort) & F.M
	Forest Saplings	2000nos	20000	10000	SMS (Hort) & F.M
	Paid training programmes	50	7500	7500	SMS (Hort) & F.M
	Mango and sapota production	500 kg	10000	2000	SMS (Hort) & F.M
	HDP in guava under drip	100trees	40000 from 3rd year	0	SMS (Hort) & F.M
	HDP in lime under drip	100 trees	30000 from 3rd year	0	SMS (Hort) & F.M
	HDP in Amla under drip	100 trees	30000 from 3rd year	0	SMS (Hort) & F.M
	Sub Total			**64500**	
	Paddy Seed Production TKM-13	80 qtl	240000	80000	SMS (Ag) & F.M
	Sorghum seed production K-12	10qtl	70000	40000	SMS (Ag) & F.M
	Cumbu seed production Co-10	10qtl	70000	40000	SMS (Ag) & F.M
	Panchakavya	800 litre	68000	34000	SMS Ag & F.M
	Fish oil	240 litre	24000	6000	SMS Ag & PP, Lab.Tech
	Coconut Production	500 kg	15000	5000	SMS (Ag) & F.M
	Coconut seedling production	1000	40000	20000	SMS (Ag) & F.M
	Daincha Seed Production	3 qtl	12000	4000	SMS (Ag) & F.M
	Fodder Seed Production - Co (FS) 29 & 31	2 qtl	80000	10000	SMS (Ag) & F.M
	Black gram and Green gram Seed Production under PPP mode	20 qtl	2400000	20000	SMS (Ag) & F.M
	Vermicompost	40 qtl	40000	12000	SMS Ag & Lab.Tech
	Waste Decomposer	240 no's	8640	2500	SMS Ag & PP, Lab.Tech
	Soil and water testing	800	80000	20000	Lab.Tech & SMS (Ag)
	Paid training	70		24000	
	Sub total			**317500**	
	Book - Organic input preparation manual	1000 nos	150000	50000	SMS AE, Agr, PP & FM
	Barnyard millet Seed production	10 qtl	70000	30000	SMS AE, Agr& FM
	Paid training	85		15000	SMS AE
	Sub total			**95000**	
	Grand total				

21. Activities of soil, water and plant testing laboratory during 2019 - 20

S. No	Type	No. of samples to be analyzed	Names of the team members involved
19.1	Soil	500	I. Jeyakumar, Lab Technician and A.Murugan, SMS Agronomy
19.2	Water	100	-do-
19.3	Others	50	-do-

22. E-linkage during 2019 - 20

S. No	Nature of activities	Likely period of completion (please set the time frame)	Time frame	Team members involved
23.1	Title of the technology module to be prepared	Integrated farming system	April 2019	SMS AS & Com. Prog
		Alternative poultry production enterprise	May 2019	SMS AS & Com. Prog
		Japanese quail rearing	June 2019	SMS AS & Com. Prog
		Silage preparation and feeding	June 2019	SMS AS & Com. Prog
		Desi chicks rearing	July 2019	SMS AS & Com. Prog
		Hydroponics Fodder cultivation	Aug 2019	SMS AS & Com. Prog
		Clean milk production	Sept 2019	SMS AS & Com. Prog
		Comprehensive disease control in livestock	Oct 2019	SMS AS & Com. Prog
		High Density planting Guava	May 2019	SMS Hort & Com. Prog
		Protected cultivation of vegetables	July 2019	SMS Hort & Com. Prog
		Off season flower production and pruning techniques in Jasmine	Aug, 2019	SMS Hort & Com. Prog
		Organic farming practices for crop cultivation	April2019	SMS Ag & Com. Prog
		Integrated crop management practices in Paddy	May2019	SMS Ag & Com. Prog
		ICM in Groundnut	June 2019	SMS Ag & Com. Prog
		Reclamation of problematic soils	Aug 2019	SMS Ag & Com. Prog
		Drought mitigation technologies	Sept 2019	SMS Ag & Com. Prog
		Organic inputs preparation and application methods	Aug 2019	SMS Ag, FM & Com. Prog
		Bee keeping	Sept 2019	SMS PP & Com. Prog
		Eco friendly Pest and Disease Management in Vegetable crops	Oct 2019	SMS PP & Com. Prog
		Oyster Mushroom cultivation practices	May 2019	Lab Tech., SMS PP & Com. Prog
		Mobile Application in farming and Cattle management	June 2019	SMS AE & Com. Prog
		Waste decomposing techniques	Dec 2019	SMS AE & Com. Prog
		ICM in Millets	July 2019	SMS AE & Com. Prog
		Value added product preparation from onion	May 2019	SMS HS & Com. Prog
		Value added product preparation from vegetables	June 2019	SMS HS & Com. Prog
		Value added product preparation from Moringa	Aug, 2019	SMS HS & Com. Prog
		Value added product preparation from fruits	Sept 2019	SMS HS, AS & Com. Prog
23.2	Creation and maintenance of relevant database system for KVK	Ex trainees database	May 2019	Comp. Programmer& Prog. Coordinator
		FLD database	June 2019	Comp. Programmer& Prog. Coordinator
		OFT database	July 2019	Comp. Programmer& Prog. Coordinator
		District profile updation	Aug 2019	Comp. Programmer& Prog. Coordinator
23.3	KVK web site in local language	Updating all the information in website	Round the year	All SMS , Computer programmer & Prog. Coordinator
23.4	Kisan mobile advisory messaging	For 2019 – 20	Round the year	All SMS , Computer programmer & Prog. Coordinator

23. Activities planned under Rainwater Harvesting Scheme (only to those KVKs which are already having scheme under Rain Water Harvesting)

S. No	Activities planned	Remarks if any
24.1	NA	

24. Innovative Farmer's Meet

Sl. No	Particulars	Details
25.1	Are you planning for conducing Farm Innovators meet in your district?	Yes
25.2	If Yes likely month of the meet	Sept 2019
25.3	Brief action plan in this regard	A meeting will be convened for the extension officials and NGO representatives regarding farm innovation and the potential farm innovators will be identified with the help of them during the months of April to June. The short listed farm innovators will be visited by the KVK scientist and their farm innovation will be recorded during the month of July – Aug. Then one farm innovators meeting will be organized at the district level in KVK to spread the awareness about the innovations. Then their innovation will be fine-tuned with the help of National innovation Fund to make it into a technology and commercially saleable.

25. Farm Field School

Thematic area	ICM Practices
Title of the FFS	Integrated Crop Management in citrus (*Citrus aurantifolia*)
Budget proposed in Rs.	30000
Prioritized problem:	Citrus Canker, die back
Village identified	Villisery
Technologies to be taught	ICMP practices
Number of farmers to be enrolled	25

Budget of FFS

S. No	Details	Amount
1	Critical inputs - IIHR Citrus Micronutrient (37.5 Kg x Rs.200)	7500
2	IPM Kit (Yellow and Blue sticky trap, Pheromone traps, Solar light trap, Streptomycin sulphate + Tetracycline combination + Copper oxy chloride	6000
3	Refreshment classes (Crop stage wise – 10 x 25 x 30)	7500
4	Training manual, Pen, Note Book	3000
5	Resource person honorarium Rs.500 x 10 sessions	5000
6	Field day	1000
	TOTAL	**30000**

26. Performa for land utilization details

S.N	Particulars		Details
1	Total land available with KVK in ha		**21.43**
2	Total Wet land available with KVK in ha		2.43
3	Total Garden land available with KVK in ha		7.67
4	Total dry land available with KVK in ha		4.45
5	Total cropped area in ha		14.55
6	Total Non-cropped area in ha (Area under buildings, road, well and farm pond)		4.08
7	**Season – I** Crops planned to be cultivated in KVK campus during June to September 2019	**Crop**	**Area (Ha)**
		Casuarinas	0.4
		Drumstick	0.4
		Coconut	2.0
		Sapota	0.4
		Cumbu Napier Co -4	0.4
		Mango	1.45
		Nursery, Guava mother plant	0.8
		TOTAL	**5.85**
8	**Season – II** Crops planned to be cultivated in KVK campus during October'19 to February'20	Agro silvi pasture (Eucalyptus, Kozhingi, Horse gram and millets)	4.45
		Casuarinas	0.4
		Lime, guava, amla – HDP and Guava mother plant	0.4
		Fodder cowpea	0.2

		Drumstick	0.6
		Coconut	2.0
		Cumbu Napier Co-4 Fodder sorghum CSV – 33 Daincha	0.4 0.4 0.4
		Sapota	0.4
		Bhendi& greens	0.4
		Mango	1.45
		Maize	0.4
		Paddy	2.43
		Nursery, Guava mother plant	0.8
		Crop cafeteria	0.4
		TOTAL	**16.33**
9	**Season – III** Crops planned to be cultivated in KVK campus during March to May 2019	Agro silvi pasture (Eucalyptus, Kozhingi, Horse gram and millets)	4.45
		Casurina	0.4
		Drumstick	0.4
		Coconut	2.0
		Cumbu Napier Co-4 / Co – 5 / Super Napier Fodder sorghum CSV – 33	0.4 0.4
		Sapota	0.4
		Mango	1.45
		Cluster been	0.2
		Daincha	2.43
		TOTAL	**12.73**
10	Area under building in ha		2
11	Area under demonstration unit		0.8
12	Any other remark		Nil

27. Budget - Details of budget utilization (2018-19) Upto 31st Mar 2019

Sl. No	Particulars	Sanctioned	Expenditure
A	**Recurring Contingencies**	**RE**	**Rs.**
	Pay & Allowances	97,74,000	97,55,436
	Traveling allowances		
	a. Field activities &programmes	1,25,000	1,19,384
	b. Training programmes		
	Contingencies		
	A. Office Contingencies		
	a. Stationery, telephone, postage and other expenditure on office running, publication of Newsletter	3,28,000	3,28,491
	b. POL, repair of vehicles, tractor and equipment		
	B. Technical Programme		
	a. Rs. 150/ person per day towards food and refreshment for kvk training programmes for farmers / extension personals		
	b. Teaching materials for training and demonstration		
	c. Training of extension functionaries		
	d. publication extension literature for farmers and extension functionaries		
	e. honorarium to farmers	5,10,000	5,11,822
	f. On farm testing (problem oriented)		
	g. Front Line demonstration on major crops		
	h. KissanMela / farmers fair (at KVK farm)		
	i. Library (Purchase of Journal, Periodicals, News Paper and Magazines)		
	j. Maintenance of farm		
	k. EDP / IFS / FFS / FLS		
	l. SCSP Component	1,91,000	1,91,000
	Total of Contingencies	**10,29,000**	**10,31,313**
	Total Recurring	**1,09,28,000**	**1,09,06,133**
B	**Non-Recurring Contingencies**		
	Works		0
	SCSP Component (Creation of Physical assets/Repairs/Renovation)	1,47,000	1,46,970
	Furniture &Equipments		0
	Vehicle (Four wheeler/Two wheeler, please specify)		0
	Library		0
	Total Non-Recurring		**0**
	REVOLVING FUND		0
	GRAND TOTAL (A+B+C)	**1,10,75,000**	**1,10,53,103**

Details of Budget Estimate (2019 - 20) based on proposed action plan

Sl. No	Particulars	BE 2019 - 20
A	**Recurring Contingencies**	**Proposed (Rs.)**
	Pay & Allowances	1,07,74,000
	Traveling allowances	
	a. Field activities &programmes	1,30,000
	b. Training programmes	
	Contingencies	
	A. Office Contingencies	
	a. Stationery, telephone, postage and other expenditure on office running, publication of Newsletter	5,00,000
	b. POL, repair of vehicles, tractor and equipment	
	B. Technical Programme	
	a. Rs. 150/ person per day towards food and refreshment for KVK training programmes for farmers / extension personals	
	b. Teaching materials for training and demonstration	
	c. Training of extension functionaries	
	d. publication extension literature for farmers and extension functionaries	
	e. honorarium to farmers	
	f. On farm testing (problem oriented)	
	g. Front Line demonstration on major crops including oilseeds & pulses, fodder crops, animal husbandry, fisheries, etc	6,80,000
	h. Kissan Mela / farmers fair (at KVK farm)	
	i. Library (Purchase of Journal, Periodicals, News Paper and Magazines)	
	j. Maintenance of farm	
	k. EDP / IFS / FFS / FLS	
	l. Soil testing refill and soil health card printing	
	m. Mobile App, Website, Production of short video films	
	n. SCSP Component (Rs.2.05 lakhs)	
	Total of Contingencies	**11,80,000**
	Total Recurring items	**1,20,84,000**
B	**Non-Recurring Contingencies**	
	Total	0.00
	SCSP Component	1,42,000
	Furniture and Equipment – Tractor	8,00,000
	Vehicle Replacement	9,00,000
	Total Non-Recurring	**18,42,000**
	GRAND TOTAL (A+B)	**1,39,26,000**

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